

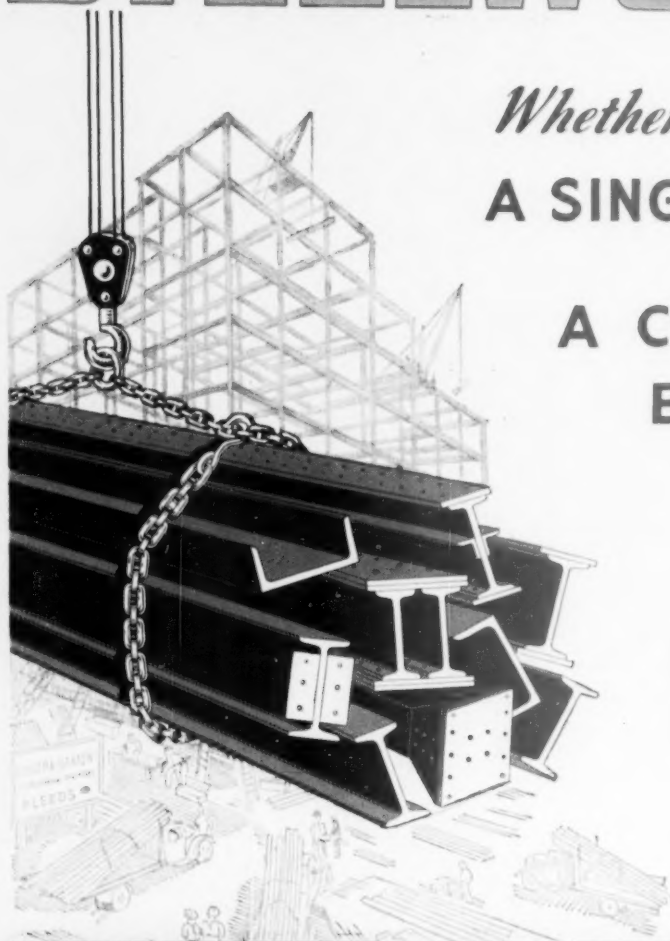
THE
ARCHITECT
& BUILDING NEWS

In this issue

- B.B.C. TELEVISION CENTRE MODEL
- GUILDFORD COMPETITION RESULT
- HISTORIC ARCHITECTURE OF BRISTOL

MAY 26, 1950 • VOL 197 • NO 4249 • ONE SHILLING WEEKLY

STEELWORK



Whether you want
**A SINGLE JOIST
OR
A COMPLETE
BUILDING**

Try
D&R
STEELWORK
SERVICE

DUNLOP & RANKEN

LIMITED

TELEPHONE 27301 (20 LINES)
TELEGRAMS SECTIONS LEEDS

LEEDS



**THE PROSPECT
IS INVITING..**

The illustration above, showing the corridor and staircase of the Stork Hotel, Walsall, provides yet another example of the warm, attractive colouring and the design suitability of Dunlop Rubber Flooring — which is available in 46 plain and marbled shades. There is of course a great deal that the illustration cannot show. But proof of the comforting resilience, absolute silence and lasting quality of Dunlop Rubber Flooring is being provided every day in restaurants, cinemas, theatres, ships, offices and dwelling houses.

The Dunlop Installation Service, which provides experienced craftsmen to lay Dunlop Rubber Flooring, is also able to offer the advice of skilled designers. Full details of the product and the service can be obtained from the addresses below.

DUNLOP RUBBER FLOORING

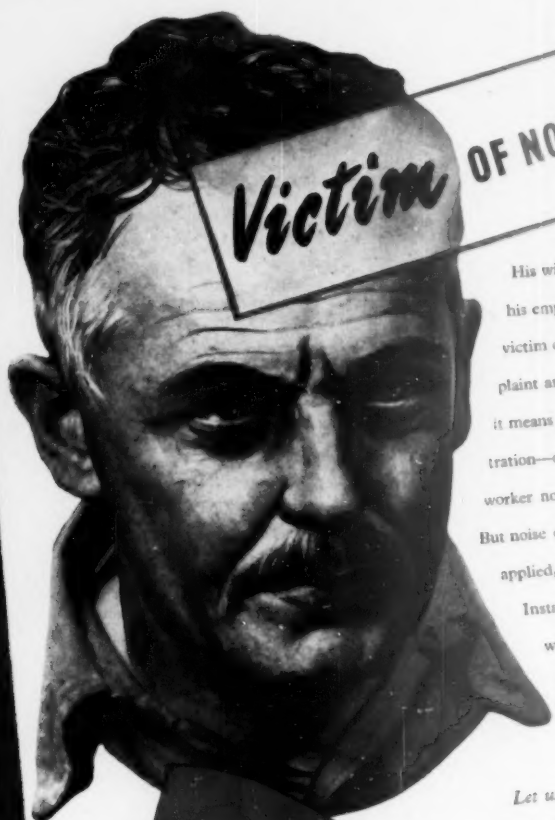
DUNLOP RUBBER CO. LTD., CAMBRIDGE STREET, MANCHESTER

LONDON: Clerkenwell House,
Clerkenwell Green, E.C.1.

GLASGOW: Dunlop Rubber Co. (Scotland) Ltd.,
70 North Wallace Street, C.4.

LIVERPOOL: 24 Cornhill,
Park Lane, Liverpool, 1.

BIRMINGHAM: Dunlop House,
Livery Street, Birmingham.



Victim OF NOISE-FATIGUE

His wife knows that worried look too well, and his employer shares her anxiety. He is another victim of *noise-fatigue*, an all too common complaint among industrial workers today. For him it means an aching head, tiredness, lack of concentration—even illness; for his employer, yet another worker not pulling his weight; a potential absentee. But noise can be quieted. Acousti-Celotex, properly applied, absorbs noise like blotting-paper does ink. Installation is quick and can normally proceed without any interference with production. Practical experience has proved that desired results can be achieved.

Let us arrange an 'on the spot' analysis of your own noise problem.

NOISE CAN BE QUIETED WITH

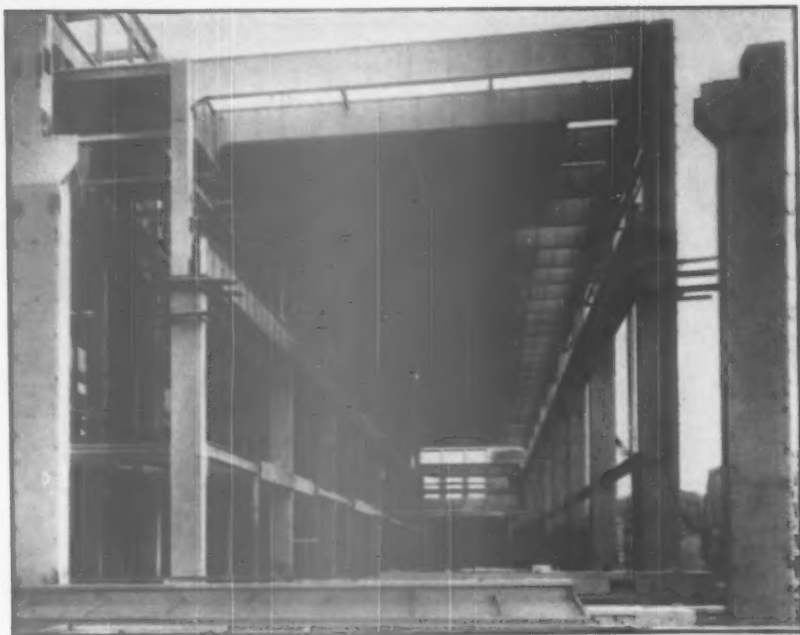
ACOUSTI-CELOTEX

CELOTEX LIMITED, NORTH CIRCULAR ROAD, STONEBRIDGE PARK, LONDON, N.W.10

The advertisement reproduced here is appearing in various Industrial Journals.

In most factories sound-conditioning is as essential as air conditioning. The best time to tackle this problem is at the planning stage in collaboration with an Acoustics specialist.

THE VERSATILITY OF STEELWORK



Power

A generating station is a complex structure which has to support heavy loads, permit assembly of cumbersome components, lend itself to modification or extension and, above all, remain a stable structure in the face of many conflicting factors.

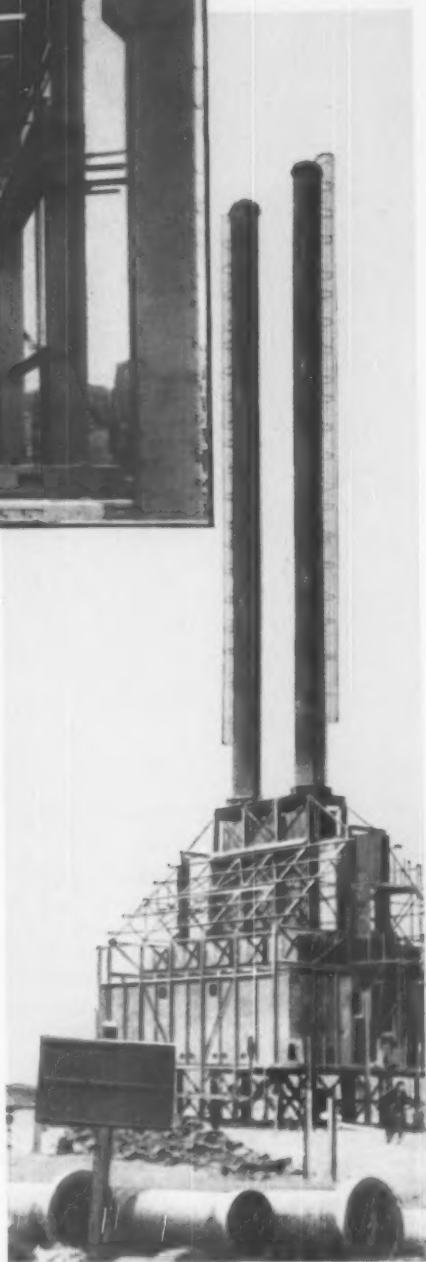
It is significant of the strength and security of steelwork, that, almost without exception, steam power stations are always of steel-framed construction.

The lower illustration shows a link in another power chain; the furnace structure of a chemical plant. This weighs 130 tons and is chiefly of welded construction.

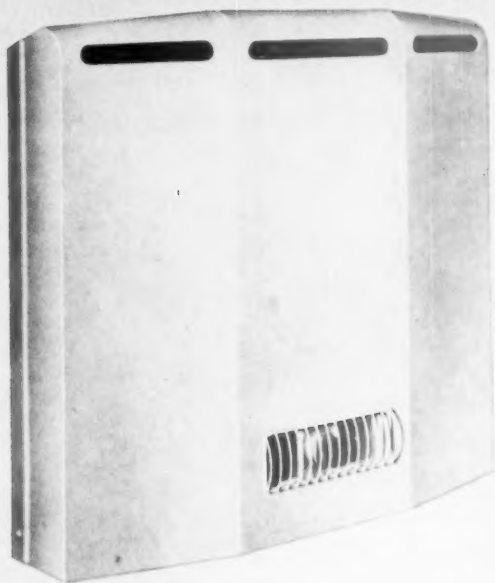


B.C.S.A

BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION
ARTILLERY HOUSE, WESTMINSTER, S.W.1



Revolutionary!



Presenting the "SAPPHIRE"

FULLY PATENTED

BALANCED FLUE SPACE HEATER

The safest, most efficient and economic Gas space heater available. All products scientifically flued to outside atmospheres by means of the Patent Balanced Flue. Early delivery can now be given.

Technical Folder upon request.



COWPER PENFOLD & CO. LTD
6, BASIL STREET, KNIGHTSBRIDGE, S.W.3
Telephones: KENSington 3677/8

SOLE DISTRIBUTORS



The rhythmic chug and rattle of concrete mixers . . . the swift flow of tipped aggregate . . . busy men and pressing urgencies . . . all the movement and noisy activity characteristic of a big constructional job—as typical of such work as the litter of empty cement bags around the site. And if the bags bear the familiar KETTON imprint—well, that is one worry the less anyway !

Sole Distributors :

THO^S. W. WARD LTD.

ALBION WORKS

SHEFFIELD

Phone :
26311 (15 lines)

Grams :
"Ketco, Sheffield"

THE KETTON PORTLAND CEMENT CO. LTD., KETTON, Nr. STAMFORD

Fleetwood big 5

The finest oil-bound, ready-mixed plastic paint in the world, washable, simple to texture and hard wearing.



Something more than a good hard gloss paint! A superb hard gloss enamel paint, for inside and outside work.



Amazing new flat wall paint which may be applied direct to new Plaster, Concrete, Cement, Asbestos, etc.



The lovely new Satin Wall finish which may also be used on interior woodwork.



A superfine synthetic enamel giving a lasting finish of extreme brilliance. All shades style-toned to harmonize with Durasheen and Duramatt.

... Plastex, Chinagloss, Duramatt, Durasheen and Duramel are but five of the wide range of Fleetwood Paints—a range decorators can rely on for quality, durability, easy working and economy in use.

Write for trade prices and shade cards to:—

Telephone: Tideway

3801/2 & 2141

fleetwood
PAINTS LIMITED

7-13 PRINCE ST., DEPTFORD, LONDON, S.E.8



Semastic decorative floor tile installation for the British Electricity Authority, Surrey.



Semastic decorative tile flooring installed in the canteen of Joseph Terry & Sons Ltd., York.



The reception room of the Standard Motor Co. Ltd., Coventry, equipped with Semastic decorative floor tiles.



Semastic decorative tile flooring in the foyer of the Essoldo Cinema, Kilburn, London, N.W.C.

**Nation-wide floor installation
service is offered by expert
Approved Contractors**

for

SEMASTIC

DECORATIVE TILES

A product of a Dunlop Company



• Operating bases in the U.K. of Semastic Decorative Tile Approved Contractors.

INSTALLATION SERVICE

Country-wide installation service is provided by the following leading floor laying specialists who represent the highest standard of experience and workmanship available in the country.

- ALBA FLOORING CO. LTD. ● J. A. HEWETSON & CO. LTD. ● HOLLIS BROS. LTD. ● HORSLEY SMITH & CO. (HAYES) LTD.
- PILKINGTON'S ASPHALTE CO. LTD. ● SEMTEX LTD. ● THE LIMMER & TRINIDAD LAKE ASPHALT CO. LTD.
- THE PENMAENMAWR & TRINIDAD LAKE ASPHALT CO. LTD. ● THE WESTERN TRINIDAD LAKE ASPHALT CO. LTD.



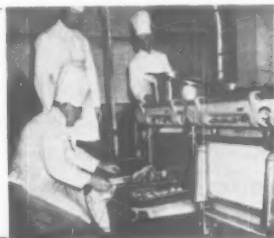
SCHOOL MEALS

Every day, during term, hundreds of thousands of nourishing and appetising meals are served to boys and girls in school. In many school kitchens these meals are cooked in gas appliances supplied by Radiation Large Cooking Equipment, Ltd., and installed either by Radiation or by the local gas undertakings. The photograph reproduced above was taken in the Sutton St. Joseph Infants' School at St. Helens, Lancs., where the North-Western Gas Board recently installed Radiation equipment. The services of Radiation engineers are available to all who are or may be concerned in the planning and equipping of kitchens for schools, hospitals, hotels, restaurants, canteens and similar establishments. Please send a note of your requirements to either of the addresses shown below.

Radiation

Large Cooking Equipment, Ltd.,
PALATINE WORKS,
WARRINGTON, LANCs.

London Office & Showrooms:
7, C.B. Stratford Place, W.1. M.O. 449 6462





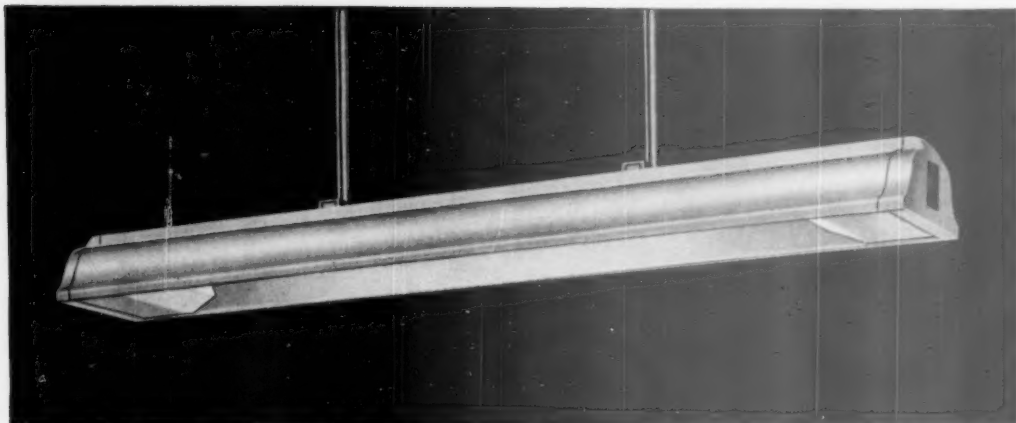
**SPECIALISTS
IN JOINERY**

SHARP BROS & KNIGHT
LIMITED
BURTON-ON-TRENT
—ESTABLISHED OVER SIXTY YEARS—

**DOOR FRAMES, WINDOWS
STAIRS, DOORS
KITCHEN FITMENTS
CUPBOARDS, etc.**

**STANDARD OR TO
SPECIAL DETAIL**

LONDON OFFICE :—Lion House, Red Lion Street, Richmond, Surrey

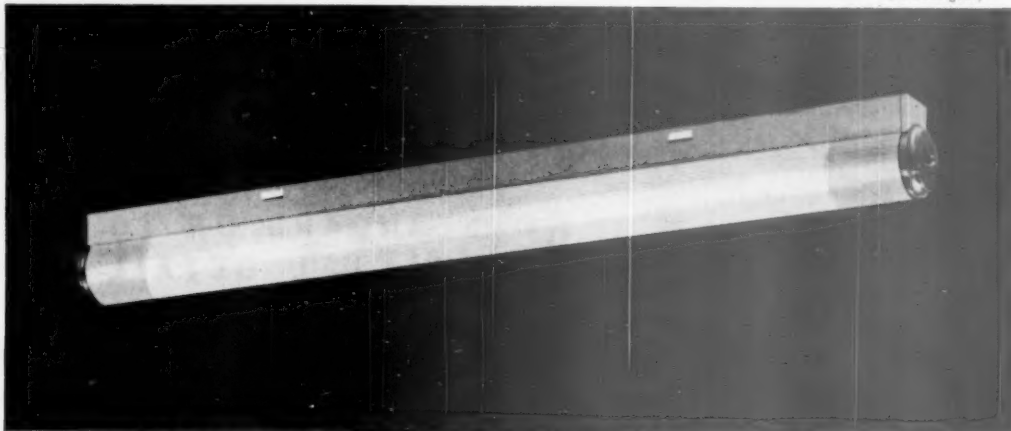


F 62004 (One 5 ft. 80w) Trough reflector with upward illumination. Single or continuous fixing. Price £5.0.0
(without gear)

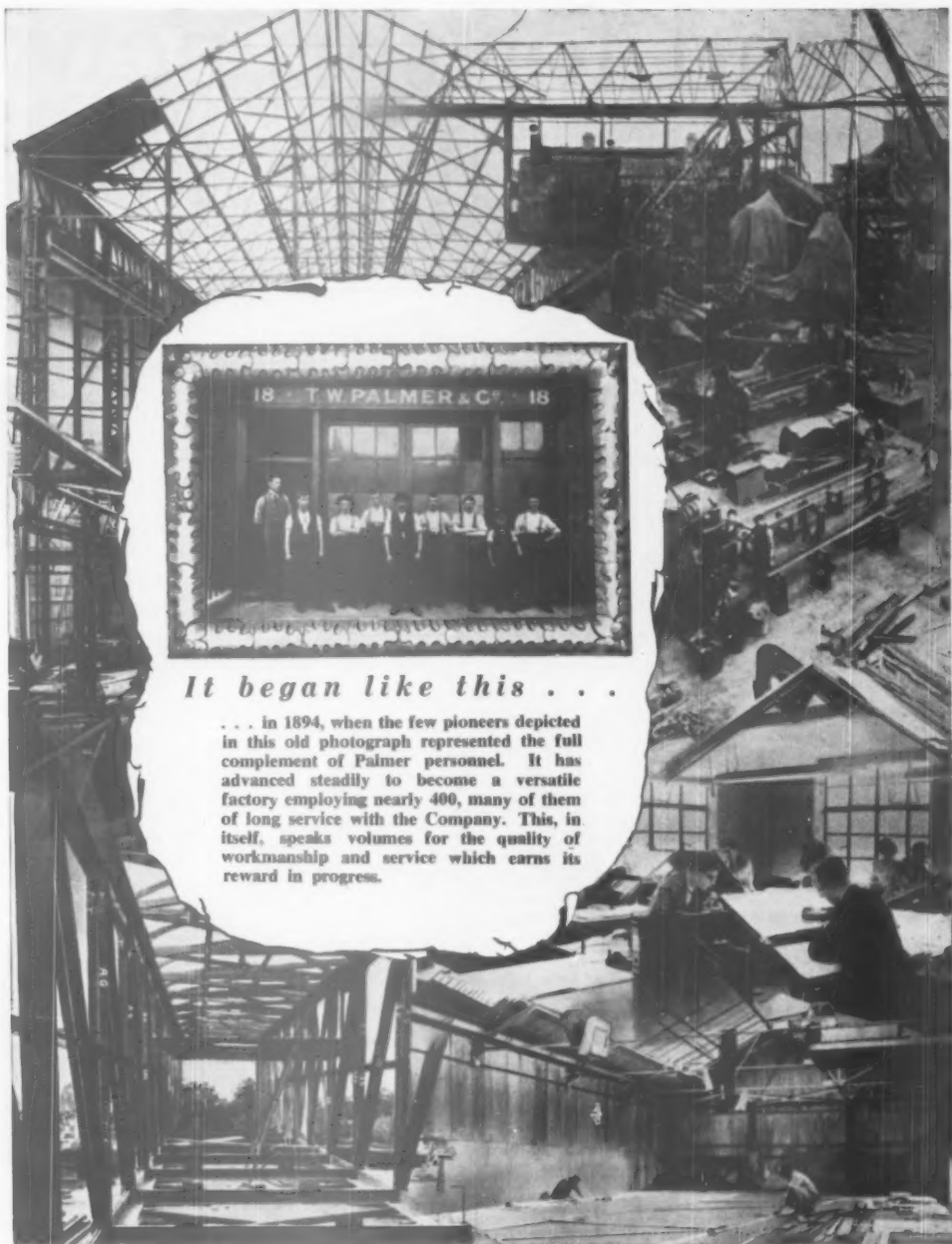
There are over 100 distinctive units
available in the range of

Fluorescent Fittings by **G.E.C.**

F 36530 (One 5 ft. 80w) Decorative fitting in clear reeded "Perspex". Ceiling or pendant fixing. Price £8.15.4
(without gear)



THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2



It began like this . . .

. . . in 1894, when the few pioneers depicted in this old photograph represented the full complement of Palmer personnel. It has advanced steadily to become a versatile factory employing nearly 400, many of them of long service with the Company. This, in itself, speaks volumes for the quality of workmanship and service which earns its reward in progress.

T. W. PALMER & CO. MERTON ABBEY LTD.
 CHURCH ROAD, MERTON ABBEY, LONDON, S.W.19
 Telephone: MITCHAM 2966 Telegrams: PALMERS MITCHAM 2966

STRUCTURAL STEELWORK OF ALL TYPES, ALSO TANKS, HOPPERS, SILOS AND CONVEYORS FOR INDUSTRIAL PLANT, STEEL MOULDS AND SHUTTERING, STAIRCASES, RAILINGS, DOORS AND GENERAL IRONWORK.

Send for this new EDA publication



THIS NEW EDA PUBLICATION is devoted to the special problems that arise in the conversion of old houses into new flats, and the advantages that electricity has to offer in this work. Costs must be kept within strictly defined limits, yet the flats must be labour-saving to meet the needs of future tenants, and so electricity is the best method of providing all the services required.

With electricity, *one* installation will provide all the services for a modern home — lighting, heating, cooking, refrigeration, hot water, cleaning, clothes washing, drying and ironing, and radio and television.

"ELECTRICITY TURNS OLD HOUSES INTO NEW FLATS" is divided into eight sections, which deal with water heating, kitchen planning, cooking, refrigeration, heating, laundry, wiring, and lighting; it is illustrated by photographs and diagrams which show how installations can be made with the greatest economy in cost and efficiency in performance.

Architects and builders are invited to write for copies

THE BRITISH ELECTRICAL DEVELOPMENT ASSOCIATION, 2 SAVOY HILL, LONDON, W.C.2



*We still find the time
to be craftsmen . . .*



In this age of machines that do everything but answer back, we're proud that Fred works for us. There's something about the knowing way he looks at a piece of timber that tells you he's been wedded to wood all his life. And he handles his tools with uncanny skill and a care that's a rare sight these days. Fred grew up in our Woodworking shop. And there are many more like him with us. We have machines as well, plenty of them; sleek and shining monsters of precision. But they wouldn't do their wonderful work if it weren't for men like Fred.

STANDARD ITEMS IN VAST NUMBERS

We produce window frames, doors and staircases in quantity. Standard in sizes—but with that little extra quality and finish that makes a world of difference. We can also produce these items to your specifications—in quantity. And we keep our delivery dates. May we send you our literature.

BOULTON & PAUL

JOINERY

DEPT. J.I.
BOULTON AND PAUL LTD • LONDON • NORWICH • BIRMINGHAM

CNO 1

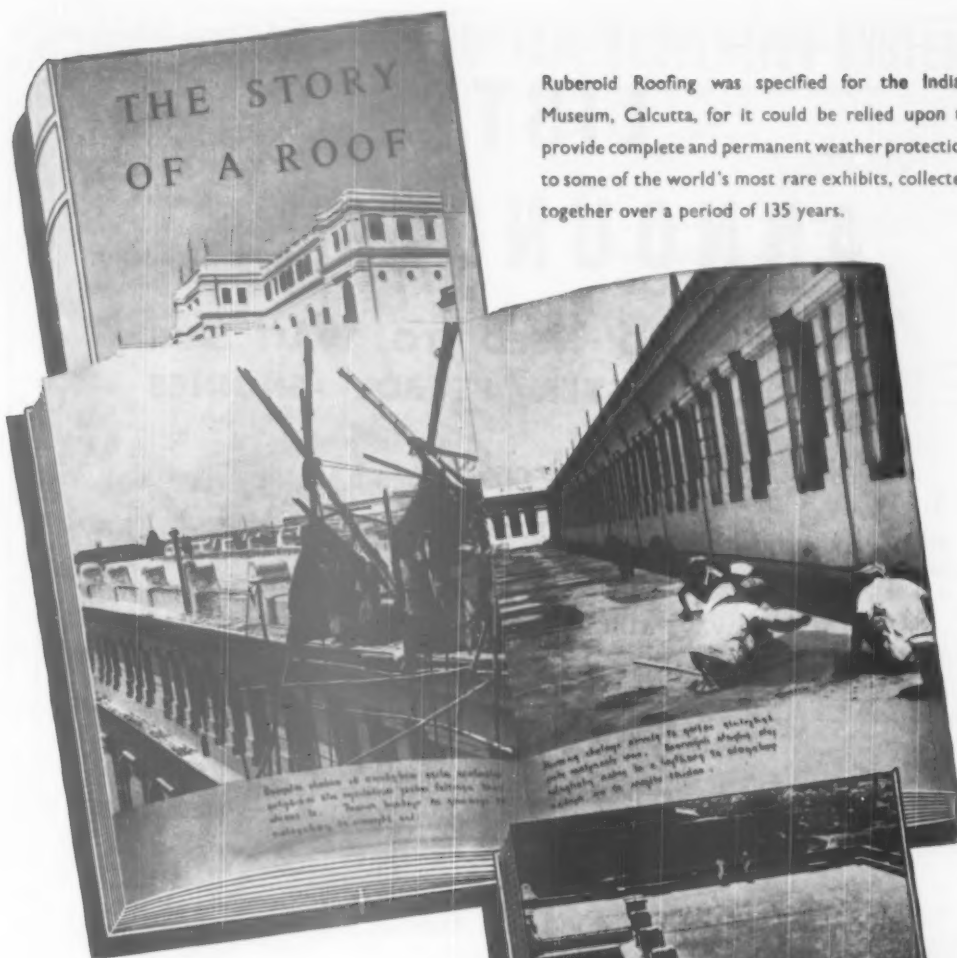


The Bratt Colbran Cloakroom Incinerator

The Bratt Colbran Incinerator provides an efficient hygienic service for the destruction of sanitary towels and small first aid dressings. Each operation of the lever initiates intense heat for three minutes, completely reducing the contents to ash. Desirable on hygienic grounds alone, the incinerator also saves the annoyance of blocked drains. Initial cost and running expenses are both low and the model will work reliably in continuous use. The finish is white vitreous enamel and chromium plating. Obtain full particulars from

Bratt Colbran

BRATT COLBRAN LIMITED 10 MORTIMER STREET LONDON W1 TELEPHONE: MUSEUM 9411



Ruberoid Roofing was specified for the Indian Museum, Calcutta, for it could be relied upon to provide complete and permanent weather protection to some of the world's most rare exhibits, collected together over a period of 135 years.

The Ruberoid system of roofing affords suitable specifications to meet the requirements of every size and type of roof and has been recognised all over the world for over 50 years as providing protection at a lower cost per year of service than any other form of roofing.

RUBEROID ROOFING

Details of the contract carried out at the Indian Museum, Calcutta, are contained in a special folder (No. 788) available on request. Architects and Engineers are also invited to write for Catalogue No. 326. "Standard Specifications for Ruberoid Roofs."

THE RUBEROID COMPANY LIMITED, 93, COMMONWEALTH HOUSE, 1-19 NEW OXFORD STREET, LONDON, W.C.1
Branches: Manchester, Newcastle-on-Tyne, Birmingham, Edinburgh, Glasgow, Belfast.

DEEP WELL PUMPS • SHALLOW WELL PUMPS

LISTER ANNOUNCEMENT

**THERE'S NO NEED TO WAIT FOR
1½/2 h.p. LISTER PETROL ENGINES**

An additional 500 engines a week
are coming from a new Lister
factory. This is the engine that
always starts up quickly **without**
wasting any time or temper.

PRICE £32 . 0 . 0 complete

Carriage paid to nearest Railway Station

"Plant is as good as the
engine that powers it.
Lister Service keeps me
satisfied."



*Users of any Lister product requiring
advice or service are invited to write to.—*

R. A. LISTER & CO., LTD., DURSLEY, GLOUCESTERSHIRE

Branches : LONDON, STAMFORD, GLASGOW, BELFAST, DUBLIN

DEEP WELL PUMPS • SHALLOW WELL PUMPS

DIESEL ENGINES 3 H.P. TO 40 H.P. • PETROL ENGINES 1½ H.P. TO 12 H.P.

DIESEL ENGINES 3 H.P. TO 40 H.P. • PETROL ENGINES 1½ H.P. TO 12 H.P.

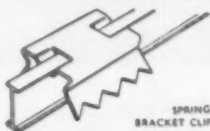
SPECIFY 'Rufflette' CURTAIN SUSPENSION SYSTEMS

BRAND

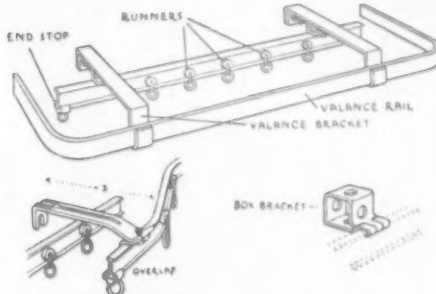
'Rufflette' brand RECESSED CURTAIN RUNWAY

'Rufflette' brand Recessed Curtain Runway is a permanent and integral part of building construction. It is inexpensive and simple to fit into wood, plastered or fair-faced concrete lintels. The runway is held rigidly in position by a patent spring clip without screws and is a concealed and a permanent fitting.

FOR WOOD OR FAIR-FACED CONCRETE

SPRING
BRACKET CLIPSHOWING SPRING BRACKET
IN POSITION IN WOOD OR
FAIR-FACED CONCRETE

FOR PLASTERED CONCRETE LINTELS

STEEL CHANNEL
STRAP FOR PLASTERED
CONCRETESHOWING STEEL CHANNEL
STRAP IN POSITION IN
PLASTERED CONCRETE LINTEL

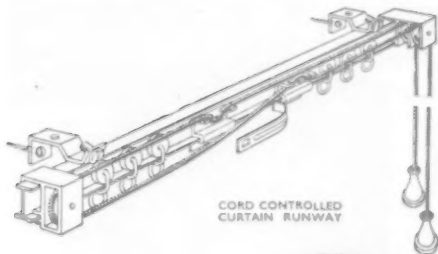
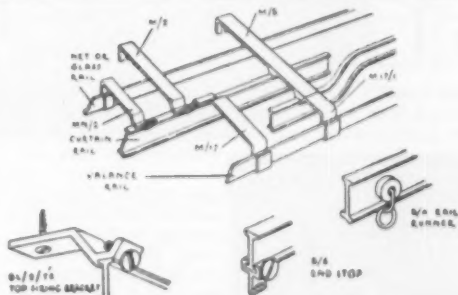
'Rufflette' brand B/L CURTAIN RUNWAY

This runway has been specially designed for wood frame windows. The construction is of heavy extruded brass, with top or face fixing brackets made specially for quick fitting and is therefore a valuable time-saving device. For strength, durability and easy running specify 'Rufflette' brand B/L Curtain Runway.

'Rufflette' brand

M SERIES RUNWAY FOR METAL WINDOWS

The special feature of this runway is the use of extension supports from the main runway for the valance and net curtain rails; this reduces the number of main supports needed and minimises drilling. 'Rufflette' brand M Series Curtain Runway can be fitted to any shape window straight or curved. The 'Rufflette' M Series Curtain Runway is specially designed for quick and easy fitting to metal windows.



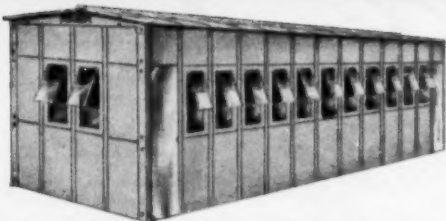
'Rufflette' brand CORD CONTROLLED CURTAIN RUNWAY

For smooth and trouble-free operation the 'Rufflette' brand Cord Controlled Curtain Runway is recommended for use in large establishments such as hotels, residences and offices where curtains receive constant usage. It is of simple construction and quickly fitted without dismantling. 'Rufflette' brand Cord Controlled Curtain Runway will fit all straight windows.

'Rufflette' BRAND

MANUFACTURED BY THOMAS FRENCH & SONS LTD., CHESTER ROAD, MANCHESTER 15
 FACTORIES: Manchester, Wythenshawe, Fall River, Mass., U.S.A. LONDON OFFICE: 156-162 Oxford Street, W.1
 Also at BRITISH EMPIRE BUILDING, NEW YORK CITY, and 75, VICTORIA SQUARE, MONTREAL

Build the BATLEY way... with your own employees



PAVILION (Design A.B.) A typical example of the adaptability of Batley Buildings. Supplied in large numbers to Councils for use on municipal sports grounds and parks. Sturdy construction, weatherproof and fireproof.



BUS SHELTER (Design C.B.) A permanent yet portable concrete bus shelter, easy to erect and can be moved in the event of the bus stop being changed. No foundations required; no parts fixed in ground. Steel framed fixed windows interchangeable with wall panels. Size 11' x 5' 8" x 6' 3" clear height. Price £31. 10. 0. —half the price of a similar brick built structure.

THE PRINCIPLE. Batley Concrete Building Units offer a new technique in the erection of the smaller type of concrete building. Using standardised tongued and grooved concrete units, aluminium alloy nuts and bolts, an infinite variety of buildings can be erected in the most economical way by unskilled labour. The units are simply placed together, tongue in groove, and bolted up. There are no parts to fix in the ground—a level, firm foundation is all that is required.

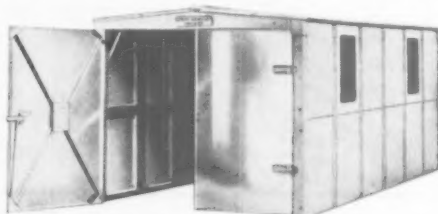


THE UNITS. The tongued and grooved concrete units are made from the finest quality concrete reinforced with steel. Fixed windows, interchangeable with wall panels, are available at no extra cost. Opening windows are also supplied. All doors, nuts and bolts are of non-corrosive aluminium alloy. Batley Buildings can easily be extended at any time by the addition of further units. The buildings can also be internally partitioned and side doors and windows fitted in practically any position. Once erected a Batley Building lasts a lifetime without attention—your first cost is your last cost. Batley Buildings are delivered complete with nuts, bolts, washers, roof sealing compound and instructions for assembly. **Free delivery** to site within 100 miles of London or Coventry.

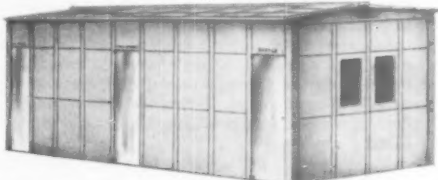
Send today for **FREE illustrated Catalogue**—

ERNEST BATLEY LIMITED
96 COLLEDGE RD. · HOLBROOKS · COVENTRY
Tel. Coventry 89245/6

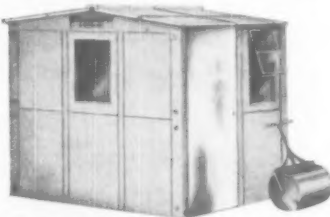
The originators and world's largest manufacturers of sectional concrete buildings



GARAGE (Design E.B.) The well-known Batley Concrete Garage is available in many sizes. The illustration is of Design E.B. No. 2, size 16' 4" x 8' 3" x 6' 3" clear height. Price £57. Fitted with aluminium alloy doors, these buildings make the ideal lock-up garages, being fireproof and weatherproof.



STORES BUILDING (Design A.B. No. 5) A fine, large general purpose building which is ideal for stores, workshops, office, etc. Can be internally partitioned and fitted with side doors. Adaptable to 101 purposes in the most economical way.



GARDEN SHED (Design E.B.) A snug, dry shed of robust construction. Ideal for the garden, with plenty of light, space for bench and garden implements. With internal partitions and side doors make excellent coal and coke bunkers.

That arresting whiteness



Cast stone made with Snowcrete is invaluable for interior decorative effects as well as for exterior reliefs such as windows and doorways.

A white feature in a dull background always compels attention. Snowcrete provides the architect and builder with the ideal medium for picking out in white those architectural features to which artistry would give prominence.

It can be used for producing renderings, facings, terrazzo or cast stone, and has every attribute of normal grey cement — plus the added advantage of being pure white.

SNOWCRETE

WHITE PORTLAND CEMENT

Full particulars from: **THE CEMENT MARKETING COMPANY LIMITED**
PORTLAND HOUSE, TOTHILL STREET, LONDON, S.W.1. Telephone: ABBEY 3456



G. & T. EARLE LTD., CEMENT MANUFACTURERS, HULL. TELEPHONE: HULL 16121
THE SOUTH WALES PORTLAND CEMENT & LIME CO. LTD., PENARTH. TELEPHONE: PENARTH 300

New Offices for Messrs. George Wimpey & Co. Ltd., Hammersmith



HEATING, VENTILATION & PLUMBING

by

MATTHEW HALL

& CO. LTD.

Sir John Burnet Tait & Partners Consulting Engineer for Mechanical Services :
Maurice G. Bland, O.B.E., M.Inst.C.E., A.M.I.E.E.

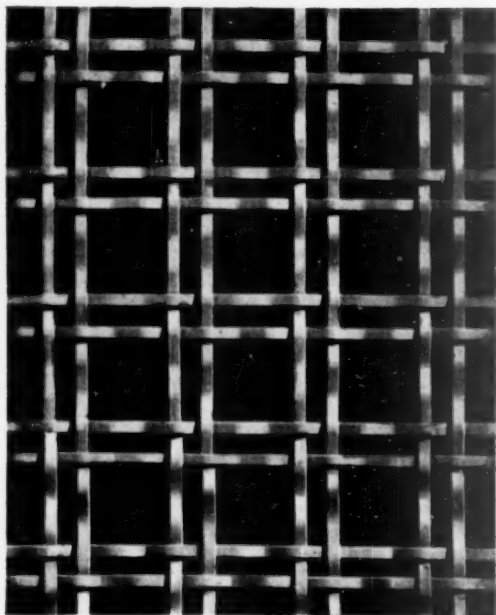


RED HEART & WHITE HEART SASH CORD

LOCKED-STITCH SOLID
BRAIDED COTTON

BRITISH MADE FROM THE WORLD'S BEST COTTON—LASTS A LIFETIME Send for sample and particulars

G. E. MEWIS, LTD., Midland Ropery, BIRMINGHAM 3.



HARCO RIBBON WIRE

The artistic effect of Harco Ribbon Wire renders it particularly suitable for use where care of design and appointment are of major importance. Architects will appreciate that it not only screens the unsightly, but allows free circulation of air. The patterns in which Ribbon Wire can be woven, make it the perfect selection for Lift Shaft Enclosures, Ventilating Panels, Radiator Covers, Electric Heater Covers, etc. Illustration shows Pattern No. 1376 W. Other Patterns and full particulars in Catalogue A 585.

Harvey

G. A. Harvey & Co. (London) Ltd. Woolwich Road, London, S.E.7

THE ARCHITECT & BUILDING NEWS

The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. Od. post paid; U.S.A. and Canada \$9.00. Published by ILIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1. Telephone: WATERLOO 3333 (50 lines). Telegrams: "ARCHITONIA, SEDIST, LONDON."

Branch Offices: Coventry: 8-10 Corporation Street; Birmingham: King Edward House, New Street; Manchester: 260 Deansgate, Tel. Blackfriars 4412 (3 lines), Deansgate 3595 (2 lines); Glasgow: 26B Renfield Street.

COST OF HOUSE BUILDING

THE Second Report by the Girdwood Committee on the Cost of House-building has appeared. It is interesting to look back on the work and history of this committee. It was appointed in 1947, reported a year later, in the middle of 1948, and now, nearly two years after, produces another Report. We commented on the first report and hoped that its rather inadequate contribution towards solving the "mysterious inconsistencies" of housing costs would be added to in a further report; we also expressed the hope that the Committee would turn some of its attention to the cost of flats as a contribution to easing housing stresses.

What actually has happened now? This second Report expends quite a lot of paper and many words confirming that its previous estimates were more or less correct and can now be confirmed—we should hope never to have seen another report if they had been wrong—but nothing is said about flats (we know the terms of reference said "house-building," but why not extend them?); no *positive* recommendations are added to the first report and nothing said about "private enterprise housing" and its relation to that built by local authorities. Hints are given that there may be another report, but, we are told, not for a long time. Is the omission of anything very definite, any discussion of the place of "private enterprise," the general lack of basic factors in this report just a matter of political strategy or is it that the committee have not had the facts or were not allowed to have them or were unable to draw conclusions from them if they had them?

We know housing is costing more—the Committee says by 20 per cent since their last report; we know, in fact, many of the things the report sets out for us—they are obvious or have been made obvious elsewhere; even so, we can welcome some new facts which the Committee has been able to assemble. For example, that the cost of materials for an average

house has gone up £86 in two years, while the labour costs are actually less by £9; we note also, not without some concern, that of the increases that have been analysed the highest proportion can be attributed to a composite item—why could it not have been split up further?—called "overheads and profits." As these two have been lumped together we can only assume that both have risen and note that profits increase while labour costs go down. It is all somewhat mystifying.

When the Report is considered more closely it will be seen to stress a number of things by strict—or is it tactful?—silence. Unfortunately, the Report followed and did not precede that of the Productivity Team, so that these two were not (even if they could have been) related. We can wish, however, very heartily that the Girdwood Report was as helpful and positive in its aims as seems the Productivity Report. Such things, however, do not explain why the present Report does not attempt to find reasons for the high costs of building materials, well over twice as much as pre-war or, in this connection, for completely ignoring another and, this time, previous report, that on the Distribution of Materials and Components; which did attempt to give some reasons for the high costs of materials. Is this another omission for reasons of political strategy or is a "quiet life" just considered best in these days of parliamentary deadlock?

The last chapter (ix) of the Report is labelled "Summary of Report and Conclusions"—not a mention of recommendations. Even the "conclusions" are in such terms as "this saving might be in the order of . . .", ". . . schemes could be more generally applied . . .", ". . . might be desirable . . ." and to cap it all we find that the Committee does "not think it possible (how very discreet!) to make recommendations which would result in substantial reductions in house-building costs while present standards of size and equipment are maintained." In other words,

lower the standards or call in the real people to handle the problem of reducing costs, the planners, the sociologists, the architects, the town-planners; we would add the building industry and all its ancillaries to the round table and then the Committee would be redundant.

Committees of Inquiry, with limited terms of reference, are not enough to effect any sort of permanent improvement in a field so wide and intricate as the cost of building, and in the case under review, this seems to be known to the Committee. Reports and still more reports are, if they can be no better than the present one, non-contributive. The Productivity Report does attempt to put a case and to make a contribution at the same time and, what is even more important, thinks it worth following up. Documents such as the Uthwatt, the Scott and the Barlow Reports had strong effects on much subsequent policy and there are others less well-known we could name in the same category. But how many official reports say little but what is already known and that without imagination, and, in the end, find themselves forgotten and pigeon-holed. What a waste of time and human effort it is to print a "list of organizations invited to submit evidence . . . to the Committee" and not to say whether the evidence was really forthcoming or, if it was, whether it was any good.

To tell us that "the labour force is now generally adequate for the work in hand" and that "the overloading of the building industry has been corrected" are statements that can only be politely classified as doubtful or lacking in imagination. Especially in view of a footnote (elsewhere in the Report) to the effect that "the apparent rise in productivity suggested by the "Building and Contracting" section of the Interim Index of Industrial Production would seem to be mainly attributable to increases in productivity for work other than new housing."

Why does it seem impossible to find out, in the first place, why houses cost anything up to $2\frac{1}{2}$ times pre-war prices when the national building-labour force is only 50,000 hands short and while most other post-war costs average out at about $1\frac{1}{2}$ times those of pre-war? And, in the second place, what are the remedies to be applied?

The Report on the Cost of House-Building* really does not answer either question, in fact does not tell us much more than is already generally known. We have built well over half a million permanent houses since the war, on a rising market, without knowing the answers and there are another 171,000 houses on the stocks. It is about time that the industry and the professions cut away from preconceived notions and biases (and, perhaps, even Ministries) and got down to something more topical and fundamental for housing and its costs; if only because they might conceivably want to get on with wider issues and with bigger things some time in the future.

* H.M.S.O., price 1s. 3d.



Clifton Suspension Bridge

R.I.B.A. CONFERENCE BRISTOL, JUNE 7-10 PROGRAMME

JUNE 7. 8.30 p.m.—11 p.m.

Informal Reception at the Conference Headquarters, Red Lodge, Park Row. Members will be guests of the Bristol Society of Architects.

JUNE 8. 10.15 a.m.—12.15 p.m.

The Inaugural Meeting at Bristol University. Reception and Address of Welcome by the Lord Mayor of Bristol. Address by Mr. Michael Waterhouse, P.R.I.B.A. Paper by the Earl of Rosse, Chairman of the Georgian Group: "Protection and Preservation of Historic Buildings."

3.30 p.m.—5.30 p.m. Garden Party and Conference Photograph at Blaise Castle.

9 p.m.—1 a.m. Civic Reception and Dance at the Pump Room, Bath.

JUNE 9. 10.30 a.m.—12.30 p.m.

At Bristol University. Paper by the Hon. Lionel Brett, "The New City Centres of Europe."

AFTERNOON JUNE 9. HALF DAY COACH AND WALKING TOURS.

1. Tour of Bristol. 2. Tour of Bath. 3. Visit to the Brabazon Hangar. 4. Visit to Prior Park.

FRIDAY, JUNE 9. WHOLE DAY COACH TOURS.

1. Cotswolds—visiting Chipping Sodbury, Tetbury, Cirencester, Bibury, Coln Valley, Northleach, Birdlip, Painswick, Frenchay, and back to Bristol.

2. Wells—visiting Dundry, Chewstoke, Winford, Butcombe, Blagdon, Burrington Combe, Castle of Comford, Chewton Mendip, Priddy, Cheddar Caves and Gorge (stopping here for lunch), Wedmore Wells, over the Mendips to Chewstoke, Dundry and back to Bristol.

3. Lacock—visiting Keynsham, Saltford, Bath, Kingsdown, Hazelbury House, Bradford-on-Avon (stopping here for lunch), Great Chalfield Manor, Lacock, Corsham, Bath and Bristol.

SATURDAY MORNING, JUNE 10. HALF DAY COACH TOURS.

1. E. S. Robinson's pre-stressed building in Bristol. 2. Clifton. 3. Burrington Combe and Cheddar.

SATURDAY, JUNE 10.

Visit to Theatre Royal, Bath. The Old Vic Company will be playing "Tartuffe."

EVENTS AND COMMENTS

TELEVISIONARY

PHOTOGRAPHS of a model and preliminary block plans of Mr. Graham Dawbarn's scheme for the B.B.C.'s television buildings at Shepherds Bush are shown on another page. As I have insufficient information to offer any sensible comments, except to say that it is an imaginative project in the shape of a giant question mark, I can only thank my stars that I shall not have to do the working drawings or set up the perspectives. It also seems to me that Mr. Dawbarn's office might prove a useful place for vendors of drawing machines and French curves.

NOT CRICKET

HARD on the heels of an invitation from the N.F.B.T.E. to attend a meeting at the Kingsway Hall on the report of the Building Productivity Team's American tour, came a notice announcing the Federation's team for its forthcoming cricket match with Mr. Ian Murray Leslie's "Vitruvians." This smacks of fiddling on the eve of Waterloo and other famous historical occasions. But it shows at least that our national sense of proportion is undisturbed by the abdominal reverberations of the industry. The therapeutic value of a long day in the field is well known and a couple of hours at the popping-crease has been known to add as much as an inch and a half to a man's stature. This match, then, is all-important to the rehabilitation of the building industry, and it is of exceptional interest to learn that the builders' team will be captained by Mr. R. R. Costain, President of the L.M.B.A. and uncrowned king of Harlow. To assist him dispose of the Building Industry Press he will have no less than five Minor County players, a Kent amateur, and Mr. W. R. Hammond, whose position as a director of a tyre firm seems a doubtful qualification for a place in the side. The occasion will, however, give him an opportunity of re-treading the path of glory. I suspect that the announcement of these names was made by the Federation's department of psychological warfare, but it is, all the same, unlikely to deter a team which may be expected to be expert in the Golden Cut, pulls from the block and drives through the covers, however many points and galleys the other types have. I am told that it is untrue that the Vitruvians have insisted on playing with a set of stumps with Corinthian capitals.

FLUSH PIPES AND CHERUBS

SEVEN moulded lead statues of cherubs were recently stolen from the grounds of a house at East Grinstead, it is thought, for their metal content, which was valued at about £70. The value of the statues was £1,000. This inability of thieves to appreciate the difference in value between a pound of flush pipe and a pound of statue is deplorable, but will perhaps vanish as State education in art improves.

SALISBURY CATHEDRAL

THE appeal for funds to repair the spire is likely to receive sympathetic attention from architects. Sir Christopher Wren, who added wrought iron ties and rods to the tower (not the ones that are giving all the trouble, I hope) wrote as follows: "The Pillars and ye Spaces between them are well suited to ye highth of the Arches, ye Mouldings are decently mixed with large planes without an affectation of filling every corner with ornaments, which (unlesse they are admirably good) glut



"I hear he won a competition recently"

ye eye, as much as in Musick, too much Division cloyes ye eare, the Windowes are not made too great, nor yet ye light obstructed with many mullions and transomes of Tracery-worke which was ye ill fashion of ye next (following) age. Our artist knew better that nothing could adde beauty to light, he trusted in a stately and rich Plainenesse." Criticism of a "Stately and rich Plainenesse" which architectural philosophers of to-day might well copy.

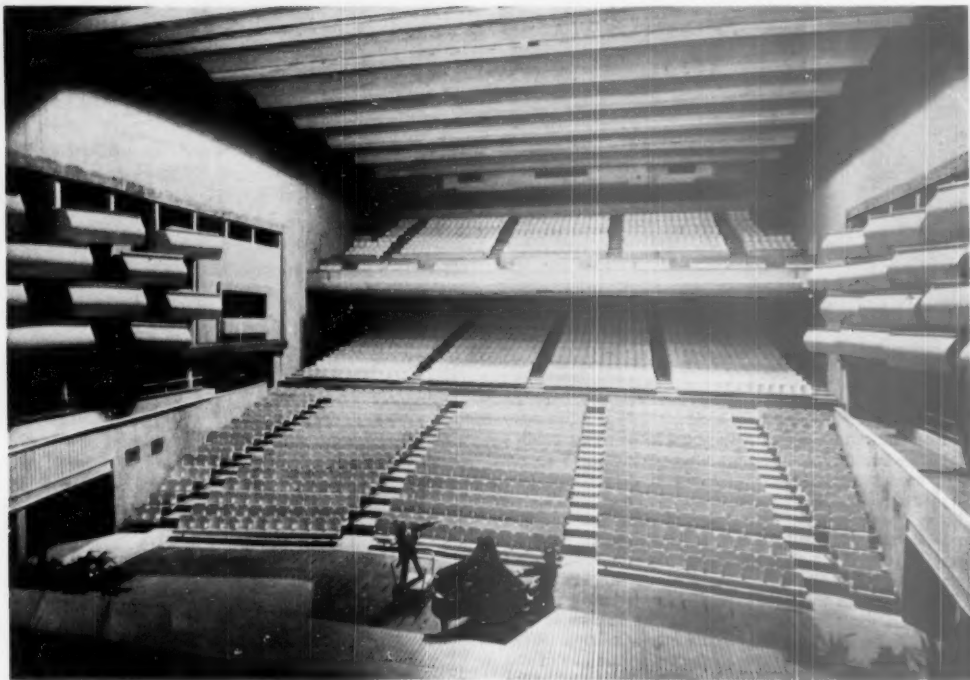
My quotation comes from a booklet called *The Romance of Salisbury Cathedral*, published by the Dean and Chapter of Salisbury, price 1s. 6d.

ARCHITECTURAL POLITICS

THE U.I.A. Warsaw Conference is off, that is to say as far as those on this side of the Iron Curtain are concerned. The Polish Section of U.I.A. is toeing the line and will only consent to take part on the condition that Yugoslavia does not. Further, the Executive of U.I.A. is expected to sign the Peace Manifesto of the World Congress of the Partisans of Peace proclaimed at Stockholm. Thirdly, the Polish group considers the request for what amounted to a safe conduct for delegates to the conference to be provocative and actuated by propaganda hostile to the Socialist countries and the People's Democracies. The demand must be officially withdrawn by the General Council of U.I.A. . . . Oh, Pooh!

THE ROYAL FESTIVAL HALL

THE L.C.C. has just issued a neat booklet on the Concert Hall which contains pictures, plans and a photograph or two of the model. The hall is fully described and preliminary seating plans are also given. The L.C.C. are now ready to receive inquiries for concert and other bookings for the hall. This does not mean that you can reserve your seat for the opening, but if you are thinking of giving a piano recital now is your chance.



Interior of the model of the Royal Festival Hall

THE ECHOES OF THE ALBERT HALL

THE booklet on the Festival Hall describes how the greatest care has been taken with the acoustic design of the auditorium and says that the final tuning of the hall will be carried out when it is completed. This has prompted a little searching in the *A. & B.N.* files and uncovered the following remarks from an account of the opening of the Albert Hall written by Mr. W. Mattieu Williams and published in Vol. V, January-June, 1871. "An invisible military band was playing for some time before the arrival of the Queen. This music was freely heard without any perceptible echo, but the outlines of the sound (if I may use such an expression) were slightly shaded; there was just that want of crispness and definition of individual sound which will be advantageous to an ill-timed band, but somewhat damaging to the display of one that was playing staccato passages with perfect unity.

"When the Prince of Wales read his address I heard every word repeated with perfect distinctness; the echo was pure and single—the two voices appeared like those of prompter and faithfully-repeating speaker. The echo was remarkably well defined, and nearly as loud as the voice of the Prince.

"When the Queen replied, her words were also repeated, but far less distinctly. This was a respectful whispering echo. When Santley sang a solo there was no distinct echo, only a slight confusion of sound; but every note of Madame Sherrington's solo was most vexatiously mocked, but not so distinctly as the words of the Prince of Wales. A slight murmur accompanied the band, but it required a strain of attention to detect any definite echo." I wonder what the Queen wrote in

her diary that night. You will note that in those days even echoes were respectful.

THE B.I.F.

I DID my duty by all three branches of the B.I.F. Most of the interesting things have already been commented on in the *A. & B.N.*, but I would like to add a little to them. First I thought that the Tube Investments Stand at Birmingham by Hugh Casson and Patience Clifford was quite outstanding, a fact which last week's photographs unfortunately did not bring out. At Earl's Court the Guinness stand by Cockade (Mrs. Casson this time) was very good indeed, although no photographers seem to have found it. The export stout was also very good. I liked, too, the Scottish Furniture Manufacturers' stand by Basil Spence. Much of the furniture had been specially designed for the show by the designers I mentioned some weeks ago. Tucked away in a corner I found one of the most effective stands. A simple interior with a quarry tiled floor, a lighted doorway at the back, light oak cottage furniture, a table laid with a delicious cold supper, chicken (real), home-made bread, farmhouse butter and green salad with a bunch of red radishes all arranged on glazed earthenware. Spotlit on the middle of the table a curiously shaped and textured bottle containing mead. A small card placed against the bottle extolled the advantages of this unusual drink.

There were several good but unremarkable stands at Olympia, but after raised platforms, hardwood frames, white railings and cactuses, what next?

A B N E R



Top left: a settee designed by Dennis Lennon, M.C., A.R.I.B.A., for the Scottish Furniture Manufacturers' Stand at the B.I.F.—carried out in mahogany with a Dunlopillo seat covered in Scottish Tweed, manufactured for the Scottish Furniture Manufacturers Ltd., by A. H. McIntosh.



Top right: a corner of the Library in the same exhibit. The table is carried out in English Walnut and the top is covered in golden brown hide. The chairs are also made in English Walnut and the seats are covered in hide to match the table. Both are designed by R. D. Russell, R.D.I., F.S.I.A. and R. Y. Goodden, R.D.I., A.R.I.B.A., F.S.I.A., and manufactured by Macneill Brothers for the Scottish Furniture Manufacturers Ltd. The rug is hand made in Skye by the Highland Home Industries.

Left: part of the bed head storage unit in the double bedroom. The furniture is carried out in mahogany and is designed by R. D. Russell, R.D.I., F.S.I.A., and R. Y. Goodden, R.D.I., A.R.I.B.A., F.S.I.A., and manufactured by H. Morris & Co. for the Scottish Furniture Manufacturers Ltd.

NEWS OF THE WEEK

The Minister of Town and Country Planning stated in the House that he is listing the Red House, Bexley Heath (designed for William Morris by Philip Webb) as a building of special architectural and historic interest. Mr. Dalton said that he had asked Kent County Council to make a building preservation order.

The public inquiry on the proposed development of Mecklenburg Square was held in St. Pancras Town Hall on

Monday and Tuesday. After hearing the evidence, Mr. H. G. Warren, for the Ministry of Town and Country Planning, said that he would like to visit the Square.

Three hundred members of the London Master Builders' Association visited the Festival of Britain site on the South Bank last Saturday at the invitation of the organisers.

On the previous evening Mr. Hugh Casson gave a lecture to some 800 of

the L.M.B.A. in the Kingsway Hall on exhibition architecture. Mr. R. R. Costain, the President, presided.

★

Sir Giles Gilbert Scott, O.M., has been appointed architect for the restoration of Guildhall and reconstruction of surrounding buildings. Sir Giles received a fee of 1,500 guineas for his preliminary report, in which he recommended the expansion of the present site.



Ministry of Health Housing Medal

Medals to be awarded each year by the Minister of Health for the best designed local authority housing schemes in each of the eleven housing regions of England and Wales are now being struck in bronze at the Royal Mint. In ten regions awards will be made for the best urban and rural schemes, and in London for the best schemes of new development and of reconstruction.

The sculptor responsible for the design and modelling of the new Housing Medal is Mr. T. H. Paget, O.B.E. The medal is 2½ inches in diameter. The obverse carries the Royal Arms with inscription in bold relief. The reverse depicts a terrace of small houses based on the design of those formerly existing in Munster Square,* a decorative panel with laurel wreath over plans and models. The medals awarded in Wales through the office of the Welsh Board, will bear an engraved inscription in Welsh, "Gwell gwr o'i barchu."

The Regional Awards Committees for 1950 have now been set up by the Ministry in collaboration with the

*Munster Square, known earlier as York Square, in the area adjoining Regent's Park planned by John Nash. The terrace housing around the Square was seriously damaged in the London air-raids and is now demolished.



R.I.B.A. and the entries for the first awards covering the post-war period ending December, 1949, are now being considered.

The medal is intended to recognise the merit of the design of the estate and each award will be made individually to the architect or designer, who will also receive a diploma signed by the Minister and the Chairman of the awards committee. A separate diploma recording the selection of the Council's scheme will be presented to the local authority.

*

Alderman P. H. Lawson is the Mayor-elect of Chester for 1950-51. An architect by profession, he studied at the Liverpool School of Architecture and was articled to a Liverpool architect. He has practised in Chester since 1921, being a Fellow of the Liverpool Architectural Society and a Fellow of the Royal Institute of British Architects. He has been a member of the City Council since 1927, was elected an Alderman in 1938, and was Sheriff of the City in 1936-37.

*

At the R.I.B.A. examination for the office of Building Surveyor under Local Authorities held on April 26, 27, and 28, 1950, ten candidates presented themselves and the following were successful: Mr. Alan C. Corke, Mr. Fred Randle, Mr. Reginald A. Todd.

*

The Board of Trade Timber Control announces that from Friday, May 12, 1950, headquarters will be removed from present address in Cadogan Square to: Lacon House, Theobalds Road, London, W.C.1. Telephone Number: Chancery 4411.

*

Copies of R.I.B.A. Prizes and Studentships, 1950-1951, are now obtainable at the R.I.B.A., price 2s. exclusive of postage.

COMING EVENTS

A.A.

● May 31, at 8 p.m., Ordinary General Meeting. "The School and the Artist." Speakers: T. F. Coade, John Hills and John Newsom.

*

On June 3, at 4 p.m., Mr. John Summerson, Curator of the Soane Museum, will open an exhibition at Studio House, 1 Hampstead Hill Gardens, Rosslyn Hill, N.W.3. The title of the exhibition is "Six Places in Search of an Artist," and shows how the interiors of six public buildings in Hampstead could be embellished. Artists exhibiting include John Hutton, Hans Feibusch, Mary Adshead, John Minton, Barbara Jones, and others. It has been organised by Hampstead Artists Council, and remains open until July 2, from 12 noon-7 p.m., including Sundays.

PARTNERSHIP

Mr. Herbert Kenchington, F.R.I.B.A., and Kenneth and Margaret Farms, A.A.R.I.B.A., are entering into partnership with Denzil Nield, A.R.I.B.A., and the firms of Kenchington & Farms and G. E. Nield & Son are being amalgamated. The new partnership will be under the name of Kenchington, Farms & Nield, and will be carried on at 130 Crawford Street, Tel.: WELbeck 6543.

PARTNERSHIP DISSOLVED

The partnership between Denzil Nield, A.R.I.B.A., and Peter Goodridge, A.R.I.B.A., and Elizabeth Foster has been dissolved by mutual consent on Mr. Nield giving up his appointment at the A.A. School of Architecture.

Peter Goodridge will continue to practice at 49 Welbeck Street, Tel. WELbeck 5643 (where he will be pleased to receive trade catalogues).

CORRECTION

In last week's issue, the warehouses illustrated in "Architecture at the Royal Academy" were described as by "Arthur N. Holt." This should be amended to "A. Neville Holt."

CORRESPONDENCE

The R.I.B.A. and its Committees

To the Editor of A. & B.N.

Sir,—I have read with great interest the letter of Sir Lancelot Keay, which appeared in your issue of the 19th instant regarding the above matter.

With the utmost respect for the views of our esteemed Past President, for whom I have a profound regard, I must confess that he has failed to convince me that the administration of the R.I.B.A. is incapable of improvement. In my view, that is far from being the case. If the Councils of the Royal Institute and the Allied Societies are prepared to give this matter judicial consideration, I should be quite willing to attend meetings of members at which the matter can be impartially and thoughtfully discussed, and to place my views more fully before them. I must, however, warn them that the reforms to which I refer in my letter are not the only ones that I have in contemplation.

I am, etc.,

JOHN SWARBICK.

Nottingham Competition

To the Editor of A. & B.N.

Sir,—Your correspondents Peter Bartlett and Gordon Graham have missed the point of our new Students' Hostel. It is quite obvious that the choice has been made with the definite intention of making the ex-Service student at Nottingham feel at home. Why else should anyone choose a design so clearly based on those

delightful barrack blocks at Cranwell?

I must admit to being unable to understand why the winner was placed ahead of the second prize winner, who had the daring originality to design a barrack block with a tower—admittedly a rather odd tower. Perhaps it was because the tower isn't quite big enough for the clock that is shown on it!

I am, etc.,

C. F. COLLEY.

P.S.—Thank heaven you didn't print the losing designs.

IN PARLIAMENT

Development Charge

The Minister of Town and Country Planning informed Mr. J. H. Hare that approximately 28,000 applications had been received for exemption from development charge for land ripe for development, and 20,500 of them had been disposed of. Mr. Hare said the delay was causing considerable inconvenience. Mr. Dalton replied that the figures showed that they had dealt with nearly three-quarters of the total claims. In many other cases they were waiting for further information. Some of the owners were dead, and that led to delay (May 16).

University Building

Sir Stafford Cripps stated in reply to Dr. Jeger that the amount of university building work licensed since 1945 to the end of the present academic year was approximately £16½ millions. Of this amount, slightly less than £4½ millions had been in respect of the institutions of the University of London (May 16).

Labour Distribution Figures

Mr. Robson Brown asked the Minister of Works what was the statistical basis for the Government's estimate of the distribution of the building labour force between housing and non-housing work in 1938. Mr. Stokes stated that the estimates were based on figures given in an article on the building and civil engineering industry published in the Oxford Economic Papers No. 7, March, 1945. This article gave estimates of the value and output on various kinds of building and civil engineering work based on the 1935 Census of Production, which the authors claimed was incomplete. The estimates of men employed, which should be treated with reserve, were derived from the value figures by using conversion factors (May 18).

Hospital Architects

According to a reply given by the Minister of Health to Dr. Charles Hill (May 18), the architect's department of the North-West Metropolitan Regional Hospital Board includes 47 professional and technical officers, of whom 24 are architects and architectural staff.

Standards Inquiry

Mr. Albu asked the President of the Board of Trade whether he had yet received the report from the committee which he set up to consider the organisation and constitution of the British Standards Institution. Mr. Harold Wilson replied that he had not. He understood that the committee was nearing the end of its task, and was at present engaged on drafting its report. (May 18)

London Airport

Mr. Charles Ian Orr-Ewing asked the Parliamentary Secretary to the Ministry of Civil Aviation what progress he expected to be made during the next year in constructing new buildings at London airport. Mr. Beswick informed him (May 17) that during the next twelve months a start would be made on terminal buildings in the central area and on permanent hangar blocks and ancillary buildings for British Overseas Airways Corporation and British European Airways Corporation in the maintenance areas. The last two of eight temporary hangars for British Overseas Airways Corporation were now nearing completion.

Materials Prices

Mr. Stokes, Minister of Works, stated in reply to Mr. Porter (May 22) that it was estimated that at a recent date the average increases in delivered-to-site prices compared with 1939 were: bricks (all types) 110 per cent; cement (in bags, delivered London) 72 per cent; timber (building softwood) 250 per cent; rainwater goods 75 per cent; light castings 150 per cent; and general ironmongery 117 per cent.

Regional Advisory Service

Mr. Stokes stated in answer to Mr. Nigel Fisher on May 22 that the Cambridge advisory service for the building industry was instituted as an experimental measure to assist in discharging in the regions the Ministry's responsibility for encouraging the adoption by the industry of the results of research and development in building. Two technical officers were employed on the service. One of their functions was to deal with inquiries relating to technical or site organizational problems, and during 1949 there were 72 such inquiries received from contractors, in addition to those from local authorities, technical colleges, and Government departments. The arrangements were renewed in 1949, and after consultation with the industry it was decided to establish in all regions in England and Wales and in Scotland a technical information officer. The duty of this officer was to co-operate with the industry and professions in encouraging the adoption of the latest developments in building practice and in making the results of research widely known.

Steel Allocation Ended

The Government's decision to terminate the system of steel allocation was announced by the Minister of Supply on May 22. Mr. Strauss said they had completed their review of the distribution scheme, and had decided that—with the exception of steel and tinplate, supplies of which were not yet adequate—the distribution of steel need no longer be subject to allocation or licence. Such regulation of exports as remained necessary would be effected by administrative arrangements between the Government and the steel industry. The similar administrative arrangements now existing for regulating the home distribution of certain types of tubes and pipes would continue for the time being.

The Government would also keep under review the distribution of other types of steel so that should any shortage again develop special arrangements could be made for dealing with the situation. Statistics of distribution of steel deliveries to the various consuming industries would be maintained, without burden to the consumers, simply by requiring them to quote on their orders for steel an indication of their industrial classification. Orders to give effect to these changes would be laid in a few days.

Building Costs Debate

Mr. Duncan Sandys, an ex-Minister of Works, opened for the Opposition. He claimed that the broad verdict of the Working Party that the productive efficiency of the building industry was now 20 per cent below pre-war level was attributable to a large extent to factors within the Government's control.

He went on to say that so precarious was the present timber position that it was almost impossible to supply builders with their requirements for current contracts. He urged the Government to make fuller use of private enterprise builders, whose methods were faster and more economical than the Government's. He said that the Anglo-American Productivity Team's Report made the same recommendation. Mr. Sandys said that shortage of materials had a damaging effect on output as operatives were unwilling to exert themselves for fear of working themselves out of a job.

Mr. Stokes, Minister of Works, denied that the Government controlled the industry at every point. They laid down the overall programme and left a great deal to the industry to decide, subject to total availability of materials and labour.

Mr. Stokes said that the Working Party were wrong in thinking the trouble was overloading. There was a scarcity of materials and it was impossible for the Minister of Health to wait for stocks to build up before he started. Mr. Stokes blamed the Opposition for the lack of co-ordination in the industry. Most of the industry seemed to belong to them. He claimed that the Working Party Report

plumped wholeheartedly for planning. Mr. Stokes said that he started deliberations with the National Consultative Council for the Building Industry 10 days ago and was meeting it again this week. The success of those deliberations depended entirely on the good will of those with whom he was seeking to co-operate.

Referring to incentives, Mr. Stokes said that they would never get output up and costs down and a high standard of work unless there were incentives. He mentioned the L.C.C. incentive scheme under which a house reduction of £63 was obtained—"a staggering result."

Mr. Stokes said his Ministry had always encouraged the use of mechanical aids, but small employers often could not afford the capital cost of plant. He was looking into the question of how that could be remedied. With regard to the shortage of timber, Mr. Stokes said there was a reserve of some 38,000 standards in the hands of the timber control from which issues could be made to prevent stoppage of work on building schemes. Provided licensing authorities behaved with discretion and merchants did not demand more than they ought to, there was no reason why we should not get through our immediate programme. Stocks would begin to build up after the next two or three months.

Mr. Marples said that the Govern-

ment must decide what the size of the industry was going to be over not less than the next 10 years, and should set up a committee to investigate measures for simplifying controls and licensing procedure, and to secure closer integration of technical, economic and social requirements.

Mr. Gibson claimed that we have as good a record in house building as any country in the world.

Mr. Mikardo did not think the Working Party Report was unbiased, and wanted the Government to compel the diversion of labour and materials from the inefficient to the efficient. (He is a business efficiency consultant.)

Mr. Bevan, Minister of Health, said that the building industry was, with few exceptions, a private-enterprise industry. The industry was very fragmented. The Government inherited the structure of the industry and also a whole series of bad war time building practices. When he went to the Ministry of Health in 1945 the industry was diluted with all sorts of queer people, all sorts of spivs who had started to work in it and were earning a considerable amount of money. The first thing he had to do was to get rid of the cost-plus system, and weed out those who were in the industry merely to make short-term profits. His second big difficulty, apart from certain other matters, was the bad prac-

tice of negotiated prices for houses.

One of his chief difficulties was to get the principle of competitive tenders established. The builders had formed themselves into ring after ring all over the country and were insisting that he should agree to prices which were exorbitant. He was asked by Manchester to approve tenders at 34s. per super foot when the competitive tender price was 21s. He told Manchester not to accept the tenders and in the end the ring was broken.

The building industry had not yet learned how to conduct its building operations economically in a society with full employment. The building industry must learn the elementary wisdom of assembling its bits and pieces and planning its job before it began.

Were the Opposition prepared to leave it to Tory authorities, full of speculative builders, to decide how many houses were going to be built to rent and how many for sale? Had that policy been adopted in 1945 there would have been housing riots all over the country. (Ministerial cheers.) It had been alleged that the costs of local authority houses were disproportionate, but housing prices had gone up by 14 per cent., whereas the wholesale index had risen by 45 per cent and building materials by 42 per cent.

(From Our Parliamentary Correspondent)

COMPETITION RESULT

New Civic Hall, Guildford

- 1st premium (£1,000): L. F. Richards, A.R.I.B.A., A.M.T.P.I., and Charles W. H. Wright; 18 Walton Gardens, Folkestone. (Design No. 35)
- 2nd premium (£500): W. S. Bryant, A.R.I.B.A. and G. A. H. Pearce, A.R.I.B.A., A.I.A.A.; "Barony," Prospect Avenue, Farnborough, Hants. (Design No. 62)
- 3rd premium (£250): Eric G. Broughton, A.R.I.B.A., A.M.T.P.I., A.R.C.A.; 52 Homefield Road, Chiswick, London. (Design No. 88)

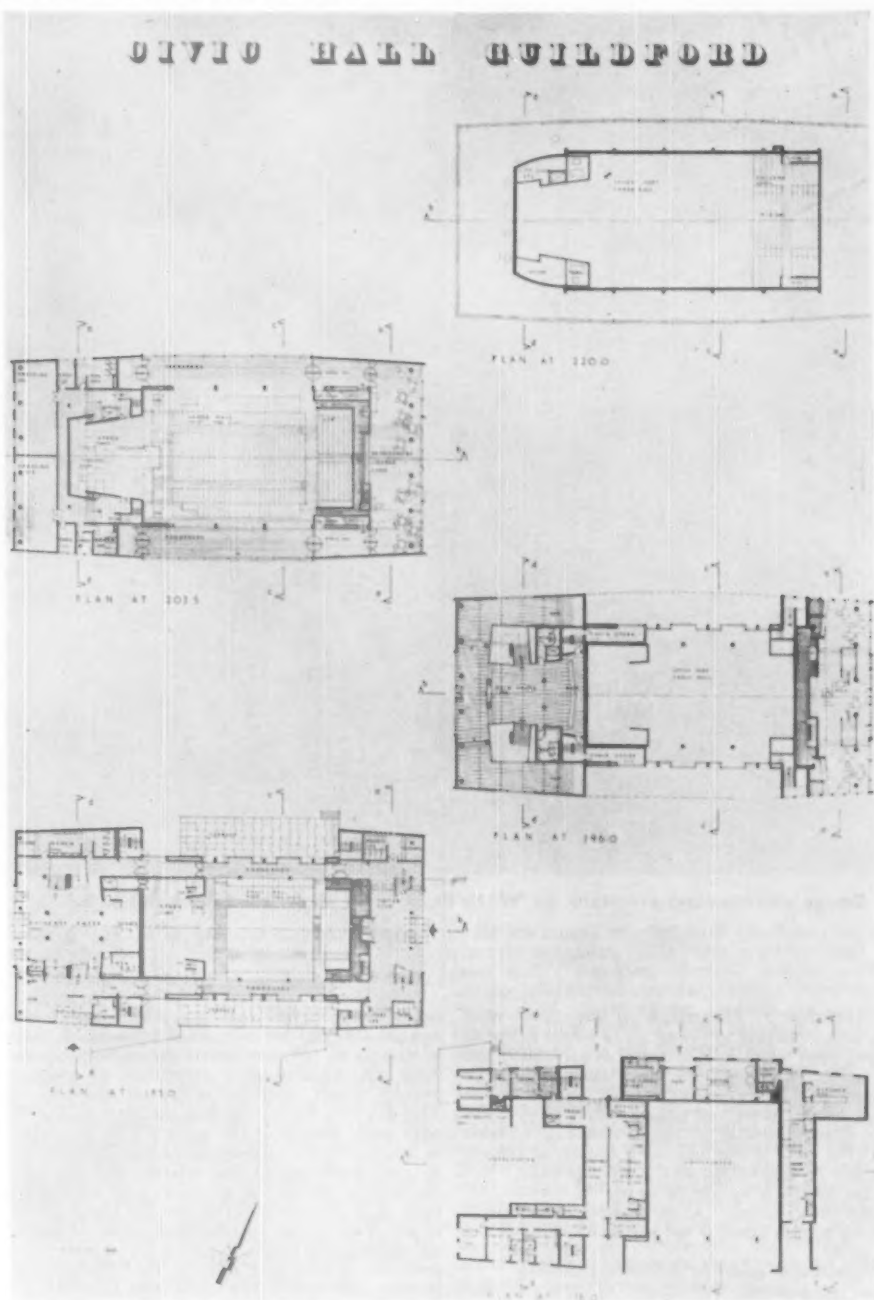
Extracts from the report of the Assessor, Mr. G. A. JELICOE, F.R.I.B.A., M.T.P.I., F.I.L.A.

THE Council is to be congratulated upon both quantity and quality of the (102) competitive designs. The problem was not easy and resolved itself into one of good architecture related to costs. Many competitors failed to appreciate the limitations of cost, and some fine schemes could not be seriously considered for this reason alone.

The site lends itself to variations of grouping. Most competitors separated their two halls as distinct units and disposed these, sometimes extremely graciously, in an informal grouping. Competitors found difficulty in expressing the quality of a Civic Hall rather than two halls of a functional character, and in some of the most interesting designs there was too much glass area to be practical. More than one competitor endeavoured, for instance, to resolve the architectural problem of two parallel halls by endeavouring to unite them into a single composition by a titanic glass foyer extending across both fronts. In the Assessor's view, the winning design is outstanding.

The design placed FIRST is a high work of art in so much that all parts, from the halls themselves to the smallest service unit, are subordinate to one idea; and that idea, like all good ideas, is extremely simple and beautiful. The authors have followed this through with skill and sensitivity, and although the building belongs to the present day, and expresses this fact, the assessor feels that it will fall harmoniously into the community of buildings of all dates that is characteristic of Guildford. It will indeed be a building of which the town may be justly proud. Particular attention should be paid to the flexibility of the use of the building, the spaciousness of the foyers and promenades, the complete separation of traffic to the two halls, and the extreme economy of use of land on the site itself.

The design as presented is not without faults, but (except for minor errors of planning which may easily be rectified) these faults manifest themselves in the sections rather than in the plans or elevations, and may be traced to the desire for a low cube and so ultimately to the question of cost. These faults have



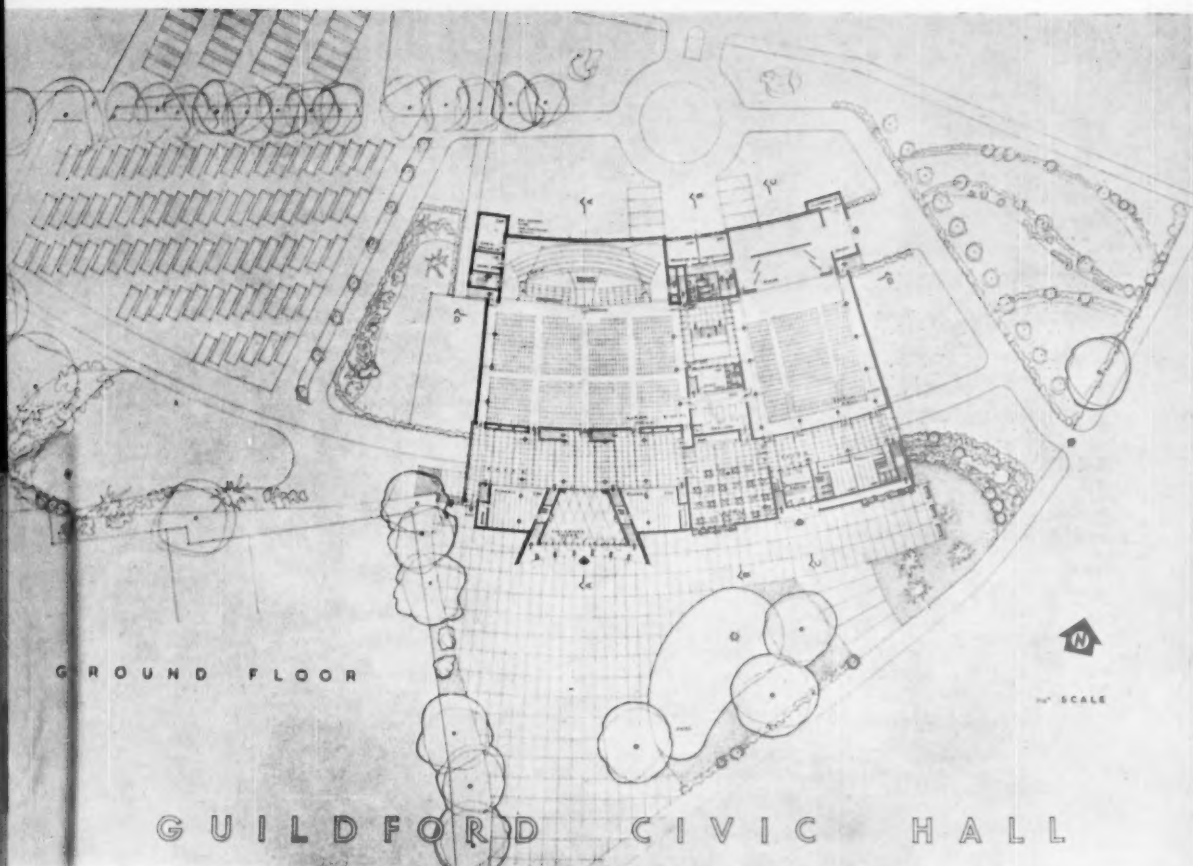
The winning design, by L. F. Richards, A.R.I.B.A., A.M.T.P.I., and C. W. H. Wright

been summarised by Mr. Hope Bagenal in his advice to the assessor as follows:

1. The dissociation of structure between the two halls is not adequate to give good insulation of noise. There may be hammering of sets on stage below

and a concert going on above; therefore structural dissociation and also insulation of airborne sound must be complete.

2. The small hall does not (as shown) fulfil requirement 29 (3): "A theatre for amateur theatricals



Design awarded 2nd premium, by W. S. Bryant and G. A. H. Pearce, A.A.R.I.B.A.

and operatics". Theatricals of any kind need seven feet minimum of flying space above the proscenium, even when a "fly" tower is not called for.

3. The height of large hall is insufficient; opening to sub-gallery is only eight feet six inches. The ceiling height above top gallery seat is only seven feet. A minimum of 10 feet is desirable in each case. The rake of the balcony is broken at centre; it should be continuous and a greater rake.
4. Concert hall staging should be on the curve.
5. Concert hall ceiling. Cross section curve useful but long section curve is not useful. Ceiling better stepped up.

Mr. Bagenal also adds the following caution:

In order to preserve dissociation of structure the two halls must be on separate heating systems; pipes and trunkings must not knit up the two halls.

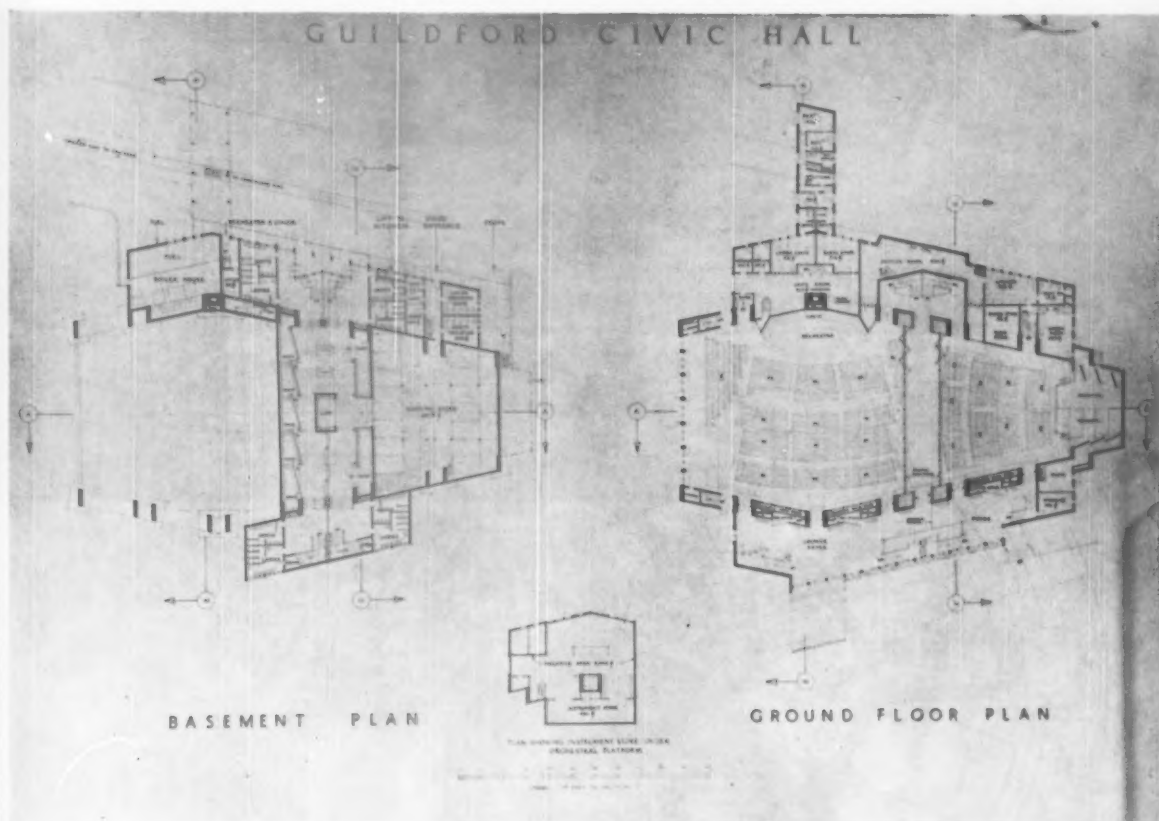
COST

The authors appear to be more than 10 per cent. in error on their cube figure and in view of the complex reinforced structure they have employed, the assessor cannot agree that the building as shown and specified could be built at the required price. Furthermore the

additional heights required when this building is erected, will call for additional expenditure, though not excessively so. In their report the authors say that they have not included such decoration as sculpture and murals which could be added as economy allowed. The assessor, having studied the form of the building with great care is of the opinion that the principle of incompleteness of finishings could justifiably be extended to most parts except the exterior and the two halls themselves. With this in mind, and with the acceptance of a low specification for the minor parts, he is of the opinion that this building could be erected with the additional height required for a sum within 10 per cent. of that laid down in the Conditions of Competition. He would emphasise here that this compact building is probably the most economical of all designs received in maintenance charges, such as heating, etc.

Under Clause 6 of the Conditions of Competition the assessor advises that the authors be requested to modify and reconsider their design in the following respects:

1. To add to the heights of the hall as described above, and take such precautions and make such



Design awarded 3rd premium, by Eric G. Broughton, A.R.I.B.A., A.M.T.P.I., A.R.C.A.

variations to shape as are necessary in regard to acoustics.

2. To re-study the orientation of the building in order to determine, in collaboration with the Council, whether they have made best use of the site in relation to potential but undecided town planning developments.

Compared with the winning design, the drawings awarded SECOND Premium show a somewhat clumsy grouping on the site. Otherwise it is an excellent design, the elevations having an air of dignity and monumentality suited to a Civic Hall. The halls are placed parallel, and are structurally sufficiently separated for acoustics. The levels are well used and there is an ingenious car approach which is admirable both for separation from pedestrian circulation and for wet weather. The pedestrian forecourt to the London Road could be particularly agreeable.

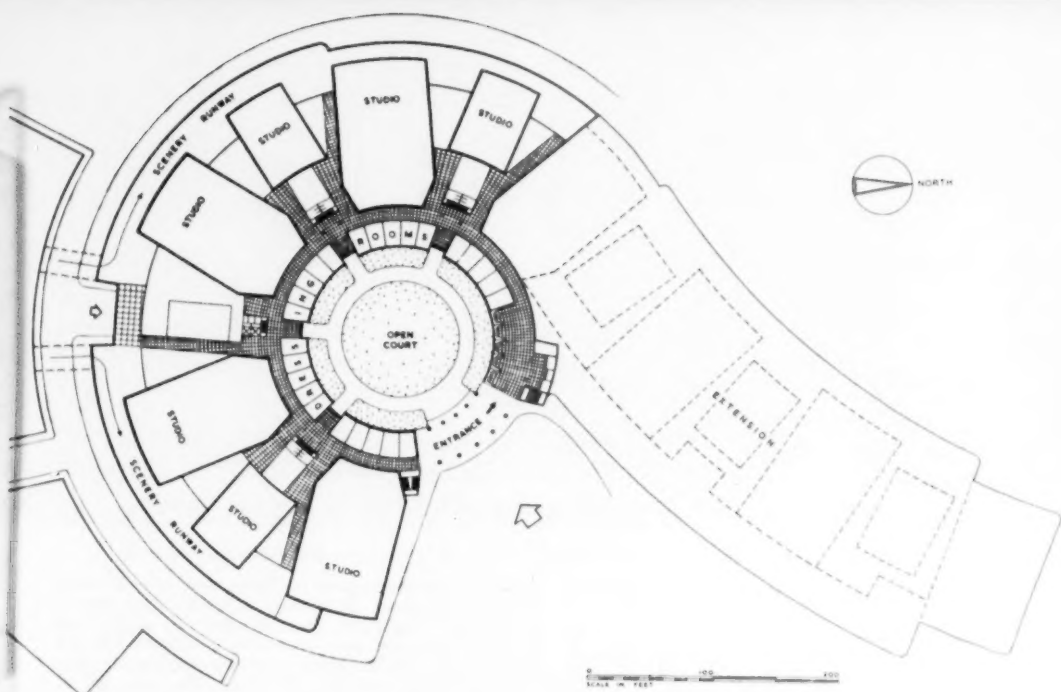
Internally the foyers and refreshment rooms are ample, and have beautiful perspectives; the halls are well shaped; and the secondary planning is adequate. An interesting proposal has been made for a balancing floor for the small hall, but the idea is necessarily excluded from the Competition on the score of cost.

The design placed THIRD has not the architectural distinction of the previous two, and some of the planning

of the less important parts is ill-conceived and at times scarcely adequate. It is more a festival hall than a town hall ("dignified, cheerful, sportive, edifice" to use the competitors' own description). Nevertheless this design, with modifications, provides the requirements in a way that could be built within the cost, and in addition attempts, not unsuccessfully, to allow for both halls to be joined on occasions to form one majestic hall. The treatment of the interiors is original and the idea of the balconies is delightful. A noble suggestion for conversion of a ramped floor to a flat floor has been put forward which might be satisfactory. The practical success of this plan depends upon proper sound proofing and dissociation of structure between one hall and another. In view of the fact that only on rare occasions would the screens be folded away, and therefore not so much liable to human and mechanical fault, it would seem that they might be a practical proposition. A special study would be required.

The assessor wishes to thank Mr. Hope Bagenal, and Mr. A. C. Matthews of Messrs. H. J. Venning & Partners, Quantity Surveyors, for their advice respectively on acoustics and on costing.

[The Editor regrets that the Elevations and Sections of these designs are not included this week as it was necessary to re-photograph.]



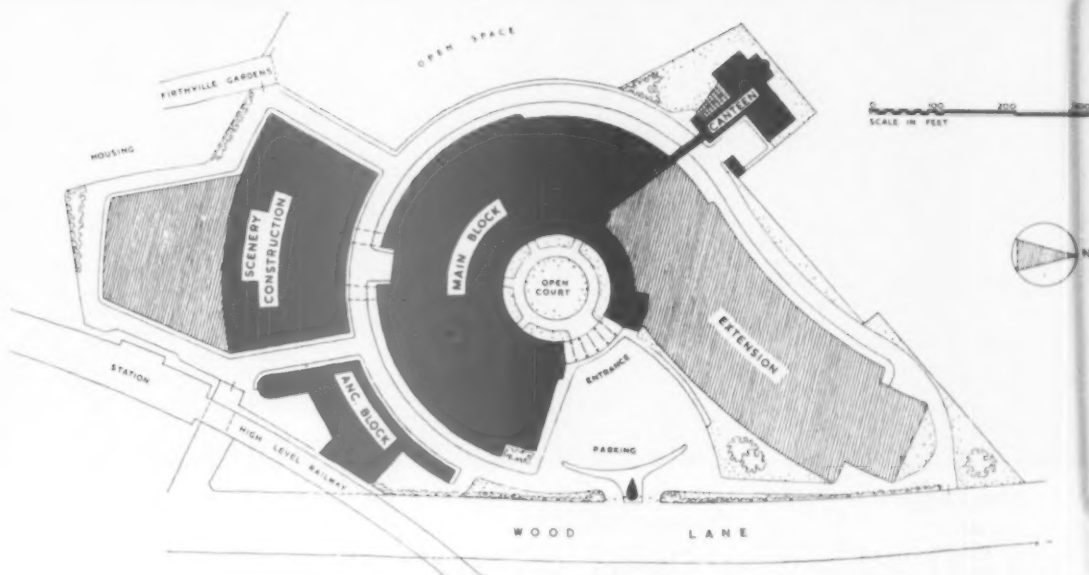
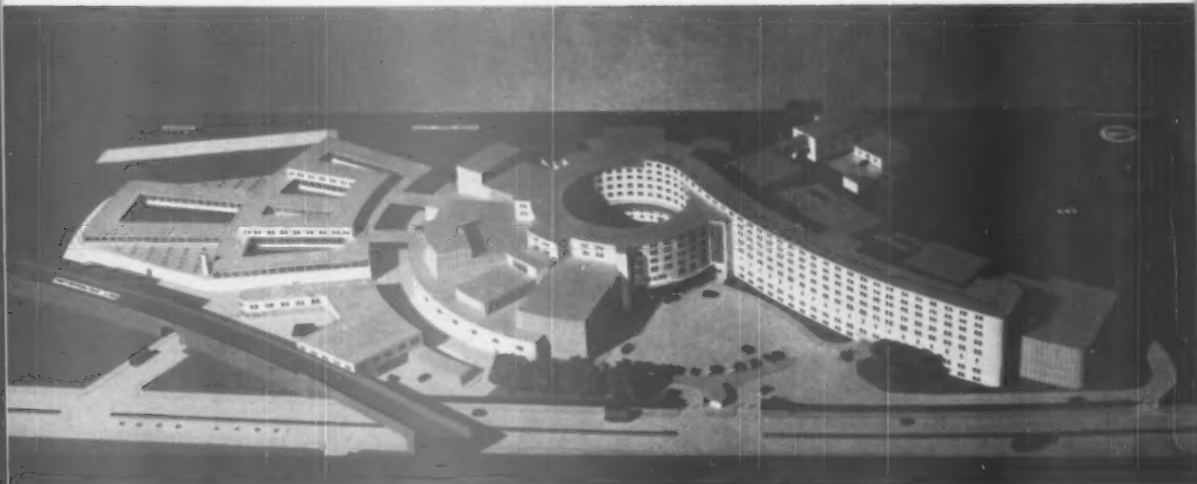
B. B. C. PROPOSED TELEVISION DEVELOPMENT

BEFORE the war the B.B.C. was seeking a suitable site on which to build permanent studios and ancillary accommodation in London because the studios at Alexandra Palace were neither adequate in size nor sufficient in number. On the cessation of hostilities the search was resumed. In 1947 the Corporation decided that the White City Exhibition site at Shepherds Bush was on the whole the most favourable of the many sites which had been considered.

It was originally intended that a planning competition should be instituted in connection with the development of the site as a whole. It was later decided however that this would be unsuitable having regard to the necessity for maintaining a considerable degree of flexibility as to the eventual use of the second half of the site. Instead, the B.B.C. invited the President of the Royal Institute of British Architects to submit names of architects suitable for a project of this kind.

From the recommendations received, the Corporation chose GRAHAM DAWBARN, C.B.E., M.A., F.R.I.B.A. (Norman & Dawbarn), who on November 18, 1949, was appointed, in association with M. T. Tudsbury, C.B.E., M.Inst.C.E., the B.B.C.'s Civil Engineer. Early in the present year an architectural conception had been evolved which was deemed by the B.B.C.'s professional advisers (HOWARD ROBERTSON, M.C., A.R.A., F.R.I.B.A. and W. G. HOLFORD, M.A., F.R.I.B.A.) to provide a striking architectural solution of requirements, taking into account the problem of neighbourhood and site conditions generally. The proposals were thereupon considered by the Board of Governors of the B.B.C. and adopted as being distinctive and at the same time having character, originality, and fulfilling their function.

The design, illustrated on these pages, has its main



entrance at the junction between the curvilinear "tail-piece" and the multi-storey "ring" shown as lying around the central open court.

On the lower floors of the "ring" there would be accommodated artists' reception areas, dressing rooms, etc., quickly accessible to:

- 2 studios each 75ft. x 120ft. x 45ft. high,
- 2 " " 75ft. x 120ft. x 45ft. high for length of 80ft., and 60ft. high for 40ft.
- 3 " " 70ft. x 50ft. x 35ft. high.

A Presentation Suite would be provided between Studios 1 and 2 (see layout), where announcements, captions, telecine and other inserted items would be televised.

Control and Apparatus rooms, etc. are planned to

be accommodated on lower floors of the "ring"; these would have observation windows overlooking the Studios at elevation approximately plus 25ft. Above these and other technical areas would be administrative and other offices of the service.

At the outer end of the studios it is planned to provide (see layout) a closed continuous scenery-runway, of a size sufficient for the reception at each studio of assembled scenery units, some 25ft. long by 15ft. wide, by 25 ft. high, which would be conveyed to the studios upon "floats" from the Scenery Block shown lying to the south of the Main Block on the plan.

The B.B.C. hope to build and occupy the premises progressively; and, subject to the limitations of capital investment, plan to have the Scenery Block completed by the end of 1952.

KEY

1. Headquarters: Red Lodge.
2. University and Art Gallery.
3. School of Architecture.
4. Bristol Grammar School.
5. Royal Fort.
6. Cabot Tower.
7. Suspension Bridge.
8. Zoological Gardens.
9. Central Library.
10. New Council House.
11. Victoria Rooms.
12. Temple Meads Station.
13. Cathedral.
14. St. Mary Redcliffe.
15. Redland Chapel.
16. Pro-Cathedral.
17. St. John's.
18. Bryan's Garage.
19. College Motors.
20. Cathedral Garage.
21. Coventry & Jeffs.
22. Windmill & Lewis.
23. Car Park.
24. Grand Hotel.
25. Spa Hotel.
26. Bright's Hotel.
27. Hawthorns Hotel.
28. Kinbourne Hotel.
29. St. Vincent's Rocks Hotel.
30. Royal Hotel.
31. Greyhound Hotel.
32. Grosvenor Hotel.
33. Rodney Hotel.
- R. Restaurants.
- P.O. Post Offices.





Bristol from the air. The Conference H.Q. is marked with a white arrow. The tower of Bristol University designed by the late Sir George Oatley is seen on the left.

THE HISTORIC ARCHITECTURE OF BRISTOL

by Bryan Little

IF an architect from London visits Bristol, whichever way he approaches he will come at once upon choice gleanings from the city's great and varied architectural wealth.

If his transport is by rail, he will see to the right, as he draws in to Temple Meads, the leaning tower of the Temple Church, in any case a fine 15th-century work of the Somerset school, but also unique among English church towers in its Pisan lean, fortunate in its survival of the raids that left the rest of the church a

gutted shell. Then in the station itself the far end of the terminal section (starting at platform 12) contains in their untouched perfection the Perpendicular arches, hammerbeam roof, and castellated Gothic façade of Brunel's original Bristol terminus of the 1830's—surely one of our most noteworthy pieces of early railway architecture.

If our architect comes by road from Bath he is not far across the city border when he drives through Brislington with its excellent 15th-century village church,



Bristol Cathedral Choir.

adorned with a West tower whose needle-spirelet on a corner pinnacle is typical of many in North Somerset and South Gloucestershire. Then in quick succession there follow the blend of conventional mid-Georgian and fantastic Horace Walpole Gothick that make up the ensemble of Arno's Court and "Castle," and a short distance past them the remarkable group of neo-Grec buildings that are the lodges and chapels, dating from the 1830's, of the cemetery at Arno's Vale. Medieval,



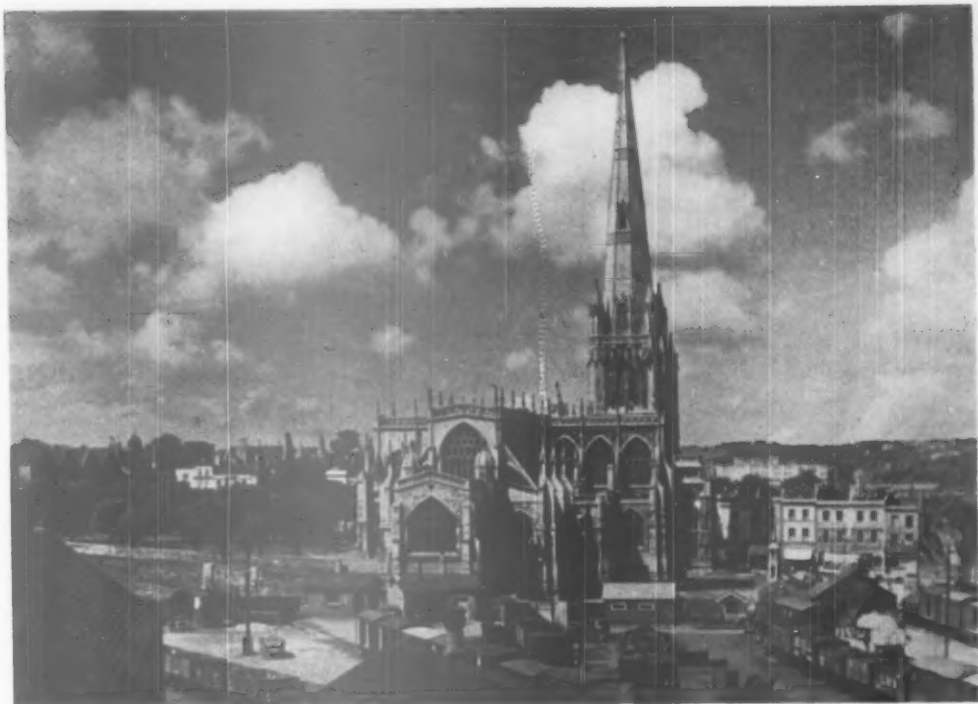
Bristol Cathedral. The Chapter House.

conventional Georgian, Horace Walpole and early railway Gothick, Grecian, our introduction to Bristol's architecture is varied, dramatic, an earnest of the city's wealth.

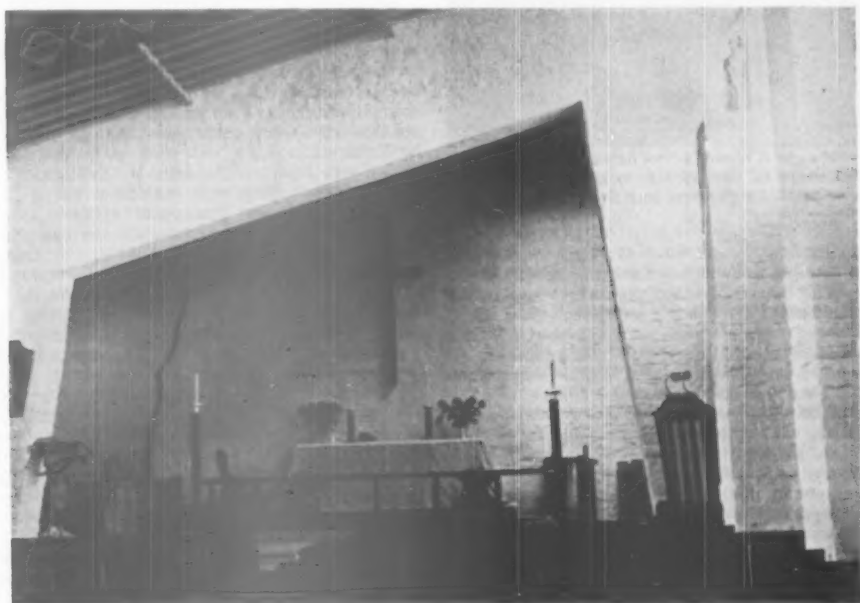
Bristol architecture, of course, reflects the various phases in the city's social history; it does so more fully for the last 250 years, the survivals from before the late 17th century being pitifully few apart from churches and almshouses. What is left from the Middle Ages is almost wholly ecclesiastical, valuable as a record of devotion and of the evolution of a cultured taste in good building, but not enough to form a complete record of Bristol the social entity that William of Worcester perambulated. There are, however, the late Norman arches in the Law Library in Small Street; these survive from a late 12th-century hall or private house that must have been in nearly the same class as Oakham Castle Hall among our secular architecture of the time. Then in the Museum is preserved the magnificently adorned and panelled late 14th-century doorway of Spicer's house, showing how ambitious were the Bristol merchants of the late Middle Ages. Unfortunately the even more splendid 15th-century residence of the famous William Canynges the younger, an elaborate timber work with oriels of an advanced design, survives only in pictures. Curiously enough, Bristol's best piece of medieval domestic architecture is really the relic of a Somerset country manor. Many visiting architects will probably go to see the modern church of Holy Cross at Filwood Park, a housing estate on the very southern outskirts of the city (incidentally the dedication and 18th-century font of this church both came from the bombed Temple Church whose tower we have already noticed). Its vicarage was once a farmhouse, but part of its structure is the exquisite polygonal mullioned and buttressed porch of the 15th-century country seat of Sir John Inyn, a local landowner who was also a judge and whose fine brass is in St. Mary Redcliffe.

The church architecture of medieval Bristol includes all Rickman's styles, though Early English is somewhat under-represented. The later work the more characteristic it is of the West. Only at the end of the Middle Ages, in the exquisite early Tudor work in the Lord Mayor's Chapel (originally the Hospital Church of St. Mark) do we get designs more reminiscent of the Court school.

The one church that is completely Norman (bar a tower of the late 14th century and an appalling Victorian aisle) is St. James'. It was the nave of a small Benedictine Priory, a dependency of Tewkesbury Abbey and founded by Earl Robert of Gloucester, whose castle keep would be among our finest did more than its foundations still exist. It survives because it became parochial in 1374; the monastic part of the church has disappeared. It is a work of modest size and great merit, not at all like Tewkesbury and with a sadly worn west front whose wall arcade and wheel window above it are of text-book interest for students of Romanesque. But the finest Norman work in Bristol, and some of the finest in England, is at the Cathedral, once the Augustinian Abbey church of St. Augustine (of Canterbury). The masonry of the south transept is from the original church consecrated in 1148, but the Chapter House and much restored Great Gateway are from a later, more brilliant phase. The Chapter House and its arcaded vestibule are beyond question the finest of their kind in the country; nowhere else can one see how rich an interior could be produced by the use of interlaced wall arcading and the usual Norman mouldings. Notable, too, at the intersections of the vault ribs both in the Chapter House and its vestibule and under the gateway,



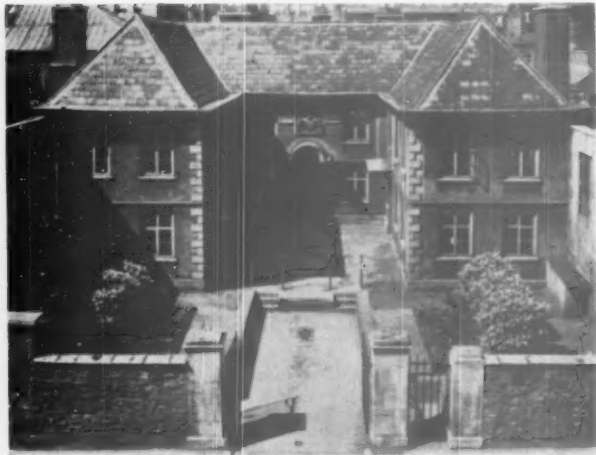
A view of St. Mary Redcliffe which well shows the characteristics that are so unusual in an English parochial church of the Middle Ages—the cruciform plan with aisled transepts, the flying buttresses, the Eastern Lady Chapel.



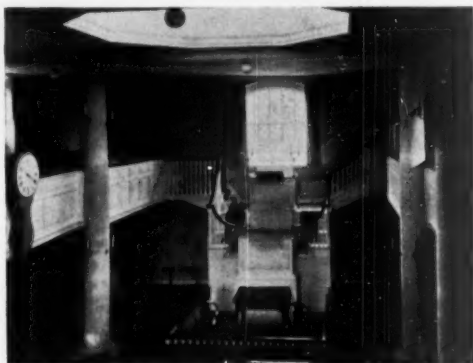
Interior of the Church of the Holy Cross, Filwood Park. Architects: Burrough and Hannam.



The Llandoger Trow; half-timbered work of as late as 1664.



The Merchant Tailors' Almshouses are an excellent example of the almshouse architecture of Bristol at the break of the 18th century. They are dated 1701.



The interior of John Wesley's New Room, the oldest of all Methodist Chapels. The work is mainly that of 1748; the Bath stone pillars may have been designed by Thomas Patey.

are the rudimentary bosses which Mr. Cave in his recent work has declared to be among the earliest bosses in the country. The best Early English work is also in the Cathedral, in the Elder Lady Chapel that leads off to the east of the north transept, an exquisite gem whose carving at least seems to have been by the same craftsmen as worked on the west front at Wells. Other work of the 13th century is scattered up and down among the churches of Bristol—in the Lord Mayor's Chapel, at St. Philip's, in the Cutlers' Hall at Quakers' Friars, which is a relic of the Dominican Friary, at Westbury-on-Trym and Henbury, and in the splendid wall arcade of the inner north porch at St. Mary Redcliffe. But the complete buildings of 13th-century Bristol have all been replaced or demolished.

With the 14th century we come to a pronounced, recognisable West Country school, making admirable use of the local limestone and imparting its inspiration northward to Gloucestershire and west into the county of Somerset; both areas seem also to have given ideas

to Bristol, and the town, as the chief commercial centre of the West, may well have been as much a clearing house for cultural ideas as for merchandise. What is certain is that the Cathedral choir and the rebuilt St. Mary Redcliffe are a pair of buildings of the utmost note in our architectural history. They are the work of designers who played a part, more important perhaps than we shall ever be able to tell precisely, in the development, in the lower basin of the Severn, of the Perpendicular style.

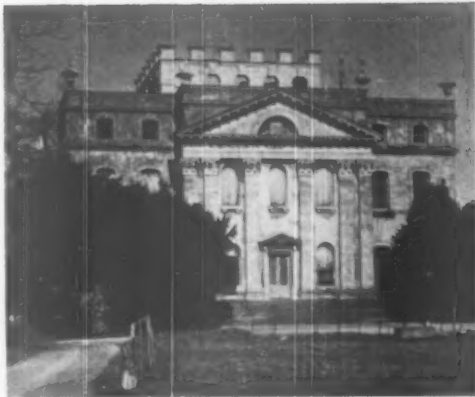
Unfortunately, the documents are lost that could settle the chronology and authorship of the work, of such pioneering importance, in the south transept and choir at Gloucester and in the choir at Bristol. But it seems that the last stages of the work at Bristol were almost contemporary with the casing of Gloucester's Norman choir and transepts in a screen of early Perpendicular panelling and tracery. The "Perpendicular" character of the stonework at Gloucester is well known and obvious. Scarcely less in the same spirit as Gloucester's choir, and perhaps earlier in date, are the lofty arches and transomed windows of Bristol Cathedral's choir as rebuilt under the rule of Abbot Edmund Knowle, who died in 1332, the work being unfinished at his death. This choir is a supremely important work, in essence like the Hall-Churches of the Friars and secular clergy in the great trading cities of Northern Europe, a complete departure from the conventional English monastic design of arcade, triforium and clerestory above. It is essentially a great one-storey design, with its arches the loftiest of any arcade in Medieval England. The aisles, with their curious little strainer vaults, are almost of the same height; the design is a forerunner of hundreds of waggon-roofed churches up and down the West Country. Nor are the minor features of the Cathedral choir of less interest than the main design. There is the rarity of the skeleton vault in the vestibule to the Berkeley Chapel, and along the aisle walls are a whole set of tomb recesses, with their rare and beautiful "stellate" decoration that links them to a set of recesses, probably by the same hand, in the south nave aisle of St. Mary Redcliffe.

Redcliffe Church had long been of an architectural

quality well above that of the average place of worship of an English medieval town. Late in the 13th century, or very early in the next, it had been given its superbly designed and decorated octagonal outer north porch, a work of a quality and exuberance hard to match and well up to the highest standards of contemporary French Gothic. Then in about 1330 or 1340 there started the rebuilding of the body of the church, all but the massive 13th-century structure of the tower, adorned by now with Decorated motifs and crowned in the same 14th century with the spire whose upper portion was blown down in 1446 (the upper part of the present spire is modern). The rebuilding proved to be a long-drawn operation, probably interrupted in its early stages by the Black Death, most of it carried out in the later part of the 14th century or early in the next, at a time when the Perpendicular style was fully developed and taken as a matter of course. Only the south transept, with its windows that are reminiscent of Lichfield, is unmistakably Decorated in its style; the choir seems like a plainer, Perpendicular version of that at Wells, and may draw some of its basic inspiration from that source (Redcliffe Church was in Bath and Wells diocese all through the Middle Ages).

Coming after such a pair of 14th-century buildings, the remaining Perpendicular work in Bristol is something of an anti-climax, copious in volume, some of it, as in the church of St. Stephen, of good quality, but in a minor key when compared with the Cathedral choir and Redcliffe. But in most of our cities Bristol's 15th-century architecture would be considered an unusually good collection. At the opening of the century come the two surviving "wall-churches," St. John's with its famous belfry-cum-gateway and an unaisled nave and chancel whose narrow dimensions are dictated by the site, and St. Nicholas', whose vaulted crypt survived both the 18th-century Gothic rebuilding and more modern bombing of the rest of the church. Later in the 15th century there came the fabrics of several churches in typical West Country Perpendicular, but greater rarity and far better work are in the suburbs, at Westbury-on-Trym. There the surviving wing and gate of Bishop Carpenter's College are reminiscent of a small quad at Oxford, and in the choir of the noble church is that architectural rarity only, to my knowledge, paralleled at Coventry Cathedral, an *apsidal* sanctuary of the 15th century.

Time has dealt hard (bar the Red Lodge) with Tudor domestic architecture; the best example in 1940 was the Aldworths' mansion, later St. Peter's Hospital, and that was utterly destroyed. Undoubtedly the half-timber tradition of the local house-builders was continued under Elizabeth, and still more so under the Stuarts, as the magnificent collection of Braikenridge drawings in the City Art Gallery shows. Street upon street of elaborate half-timber fronts concealed a wealth of strapwork plaster ceilings and richly carved chimney-pieces in freestone, the part above the fireplace adorned with a mixture of caryatids and angels, of heraldry and scriptural scenes. Some such chimneypieces are preserved at the Red Lodge; there are dozens shown in detail in the Braikenridge drawings, some of them, for all their Jacobean feeling and artistic kinship to Bristol's ornate group of church monuments early in the century, bearing dates as late as the 1670's. A few such houses are still with us, notably in King Street, with its range of 1663-4 containing the famous "Landogier Trow." They are typical of a tenacious West Country conservatism in architecture that could make the Gothic tradition survive, even in a city like Bristol, to the very end of the 17th century. Nowhere is this blend of



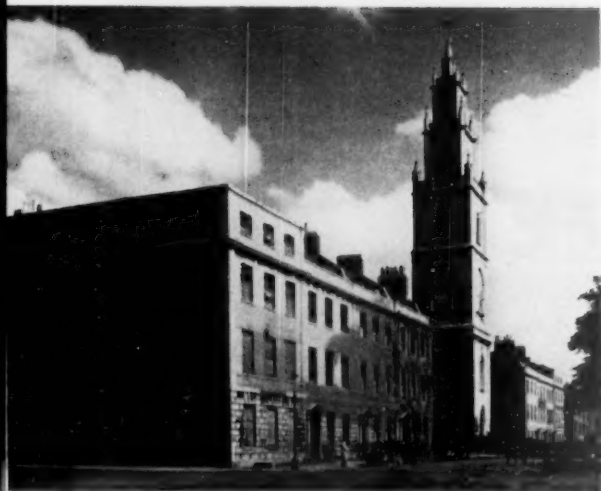
Kingsweston House, built by Vanbrugh in 1710.



Redland Chapel, designed by John Strachan, 1743.

Renaissance and surviving Gothic shown better than in Bristol's almshouse architecture. There are five important surviving blocks—the remaining half of the Merchant Venturers', the Merchant Tailors' (now the Weights and Measures Office), the magnificent, College-like three-sided court at Colston's, the rebuilt Burton's, and Ridley's. All of them, with a Renaissance idiom applied to a basically medieval design, also have in their squared yet mullioned fenestration something that harks back to the days of tracery and miniature diamond panes. The shell of Ridley's, built of squared freestone as late as 1739-41, is specially notable as a staunch piece of old-fashioned vernacular lingering on into the midst of Georgianism.

We come now to the 18th century, period of Bristol's great prosperity as England's second city, of the greatest architectural expansion the city had yet witnessed. It was a time of renewed variety, of variety in the types of Bristol's buildings and in the purposes they were called upon to serve, also of a new and fascinating variety in the materials used.



The stone-faced residences of Portland Square (c. 1790) were fashionable when first built. St. Paul's Church, with its remarkable steeple, Wren with Gothic detail, was designed by Daniel Hague and consecrated in 1794.

Hitherto the stock materials of Bristol had been timber and plaster for domestic work, stone of various types only for the grander houses, for public buildings, for churches. There is evidence that bricks were made in Bristol as early as 1673, but these may have been for industrial purposes such as the lining of glass furnaces rather than for ordinary house construction. The immediate locality provided, and still provides, plenty of grey or pinkish lias or pennant for the main structure of walls, and this was the normal material for the churches of the Middle Ages, with freestone, also from the district, for the worked quoins and mullions. For such important buildings as the Cathedral or St. Mary Redcliffe, for the canopied tombs with which the area is so well supplied, there was the particularly beautiful limestone from the great hill-ridge of Dundry, a few miles to the south. Bath stone did not find its way to Bristol till the days of more efficient river transport in the 18th century. But in Georgian times the range of materials used by Bristol builders was far wider than heretofore. Pennant and freestone were still available, and marble for monuments was easy to import by sea. Much work was done in a beautiful local brick of a dark red hue, and many buildings, whether in brick or pennant, were faced with freestone or with the honey-coloured Bath stone that was much in demand by the builders of terraces in imitation of Bath. Finally, there was a strange material of particularly local character, the blocks and capstones for walls cast out of the blackish-purple slag of the spelter and copper works; it is most common out on the eastern side of Bristol in the mining and industrial area of Kingswood, used more for corner stones and other accessory parts of buildings than for the main structure of walls. But at times it is the main material, and as it is extremely durable it has lasted well in some buildings of an ornamental or decorative type. Its most notable use is in the gazebo at Warmley Towers and in the handsome Gothic stable block at Arno's "Castle," a blend of black walling and grey stone dressings aptly dubbed

"The Devil's Cathedral" by none other than Horace Walpole himself.

The Georgian buildings of Bristol are there, broadly speaking, to perform four functions. There are the public buildings, cast up and down the city and its outskirts without being arranged to any definite plan — churches new or rebuilt, the Theatre Royal, the Halls of the Bristol Companies, the Library, the Commercial Rooms, the Council House of 1824, Wood of Bath's magnificent Exchange of the 1740's. There is also the three-arched Bristol Bridge of the 1760's, built to replace that of the 13th century with the local James Bridges as its designer, still retaining its Georgian arches though they are scarce to be seen beneath a ham-handed and insensitive widening of the last century. Then we have the residential growth of the city to meet the needs of a commercial class more prosperous than ever before and increasingly particular where it lived. An extension of this same residential development is the building of good-class houses in many of the surrounding country areas and villages. Then there is the growth of the very separate Spa-cum-resort community of the Hotwells and Clifton.

Both in the 18th and early 19th centuries Bristol has work to show by architects of national standing. There were also designers of purely local fame—Strahan, the Paty family, James Bridges, Allen, and Hague. We come now, in Bristol as elsewhere, to the age of buildings by known architects, though there are cases where the underlying economic and artistic factors are more important than precise attributions. Most of the buildings



College Street was built about 1770 by Luke Henwood. A house in the foreground has the windows with their five keystones that are so typical of Bristol Georgian, and the street is the best of all places in the city to see Georgian bow windows. It was in this street that Coleridge lodged and Friese Green, inventor of cinematography, was born.



Albermarle Road, Clifton, 1750-60.



Berkeley Square, 1770-80.

by "national" architects are individual, isolated structures; the areas of more extensive development — squares, terraces, streets, parades, are by the local school.

The old city was only in part Georgianised and the parishes nearest to the central districts were as much concerned with manufactures as with merchandising and residence. But Bristol is poor in her survivals from 18th-century industry. Her skyline was once as much broken by the cones of kilns and glass furnaces as by steeples, but of them as of her old shipyards there are no traces now except for one possible glass-cone and the ruins of the copper works, down by the Avon at Crew's Hole above the city. In the central parishes themselves Georgian houses and public buildings are less in evidence now than their successors, and some like the Assembly Rooms and Merchants' Hall were destroyed at various times in our own century, nor in every case by German bombs. But here, none the less, are Bristol's chief examples of Georgian public architecture. They are seldom as monumental in their scale as befits England's second city; they lose something of their due effect because they are not grouped together in any unified lay-out or formal design, but many are of great merit and interest. John Wood the Elder's Palladian Exchange of 1740-3 is the finest composition, reminiscent in some ways of his work in Queen Square at Bath and greatly admired even in its own time; the colonnaded piazza at the back clearly derives from the Royal Exchange in London. A group of Georgian churches and portions of churches reminds one in a small way of the Wren-Gibbs sequence in the capital, and the steeples of the Bristol skyline are a striking mixture of the Middle Ages and the days of the slave trade. Opposite the Exchange, Corn Street has, in the coffee room of the Commercial Rooms, a Regency building of 1810-1 by C. A. Busby, who later did so much at Brighton, a brilliant interior that could scarcely have been bettered even in its own time. By comparison the nearby Council House, correctly and Grecianly rebuilt by C. R. Cockerell in 1824, is somewhat tame. He did far better round the corner in his massive Doric Bank of England of 1847: the building is very like his work for his Bank of England employers at Liverpool. The places of worship include an 18th-century group of Non-conformist Chapels and the imposing Meeting House of 1747-9, built to the designs of Thomas Paty by the wealthy Quaker body as a replacement of an earlier building. The best known of these chapels is John Wesley's New Room. It was started in 1739, but the present pillared and galleried interior is almost wholly a rebuild of 1748; the columns are strikingly like those of the



Duke Street, mainly late 17th century with 18th and 19th century additions.

Quaker Meeting House. A more distinguished building is the Classic chapel of the Unitarians in Lewin's Mead; it replaced an earlier one in 1787-8, with its designer an otherwise unknown London architect called Blackburn. By way of contrast, King Street saw in 1764-6 the building of the Theatre Royal. This is perhaps the greatest treasure, if only because of its all but unique rarity, in the whole corpus of Bristol Georgian. The architect was James Paty, but the effective model, particularly for the stage and proscenium design, was Wren's Drury Lane.

The residential areas of Georgian Bristol are those most exclusively the work of local, often anonymous designers; more than the public buildings they show the local, vernacular features of the Bristol architecture of the time. New quarters were built as dwelling places for the more prosperous citizens, and they arose in several directions on the outskirts. At first they were on comparatively low and level ground, then as the fashion grew for views and vistas they appeared on such ridges as Kingsdown and on the slopes of Brandon Hill in the direction of Clifton. The process, minus the aristocratic element that developed the Mayfair estates, is very like what occurred in London. The great expanse of Queen (Anne) Square was the first of these opulent residential districts, along with its close neighbour Prince (George of Denmark) Street and Orchard Street on the Brandon Hill side of the River From. Then on the eastern side of Bristol there came two sequences, first that of St. James', Brunswick, and Portland Squares, and on the

other side of Stokes Croft a district with its main features in King (George II) Square, Jamaica Street and Carolina Row. All these (bar the stone-faced Portland Square) were mainly in local brick with stone dressings, and in spite of bombs and great deterioration the bulk of the work survives; the worst damage was done in Queen Square by the rioters of 1831, and two sides had to be almost wholly rebuilt in a not very inspired Grecian, dominated by the new Custom House by Sydney Smirke. It is in these fine living quarters, and in hundreds of other Georgian houses up and down the Bristol area, that one notices certain points that one may call characteristic of Bristol 18th-century work. There are the keystones in the form of grotesque masks, and other points of detail more exuberant than one finds in most Georgian exteriors. There is a strong vein of provincial conservatism, the use as late as the 1760's or 1770's



Queen Square, North Side. This is one of the two sides rebuilt after the riots of 1831. In the foreground is the new Custom House by Sidney Smirke.

of features that the London area and the academic architects had used but had long discarded, the fondness, for instance, for heavy, splayed keystones over windows and of square blocks at intervals down the jambs—a feature one finds, in the form of windows surmounted by five, seven, or nine splayed keystones, in hundreds of Bristol houses (and also at Bridgwater) down as late as Victoria's reign. The houses were adorned inside with rich woodwork in West India mahogany, and there worked in Bristol an exuberantly Rococo school of *stuccatori*, Thomas Stocking being a leading figure; his work is found in Bristol itself in such houses as Arno's Court and the Royal Fort, and in the district at Corsham Court and in the Royal Crescent at Bath. There was also in Bristol a great fondness for bow windows which long outlived Georgian architecture; bows thrust out into pavements became a nuisance and had to be forbidden by the Regulating Act of 1788.

Side by side with the residential extensions there came the building in the district of what in their own time amounted to country houses for Bristol merchants with a desire to be country gentry as well. The superb pioneer of this fashion was the Southwells' house at Kingsweston, replacing a Tudor or Stuart house and the work of Vanbrugh in c. 1710-3. By Vanbrugh stan-



The Paragon, Clifton. A crescent built between 1809 and 1820, possibly to the design of John Drew. The curious porches also occur in a few houses of Cornwallis Crescent.

dards it is a mere cottage, but it is easily the largest house of its period within the city of Bristol; it has a brilliant pilastered façade and exploits a site that has a view across the Severn estuary to the hills of South Wales. Scarcely if at all less notable is the architectural ensemble at Henbury, near the other end of Kingsweston Hill. There an older house was replaced after 1795 by the Blaise Mansion, designed by William Paty, to which Nash and C. R. Cockerell made additions. Within its domain, on the hilltop belvedere of Blaise Hill, is the "Castle" in Georgian Gothic that a previous owner had built as a summerhouse-cum-viewpoint in 1768; his architect was Robert Mylne. Then in the same village the owners of the mansion employed Nash on the famous Blaise Hamlet of 1811. It is the same all round Bristol—in the approaches to Kingswood, at Henbury village and Brislington, in Clifton-on-the-Hill, in a particularly good group house at Frenchay, at the well-known Redland Court of 1732-5 by Strahan. Most of the work was by local men, but we have seen Vanbrugh at work at Kingsweston, and Clifton Hill House of 1747 was put up by local builders to a design-book plan by Isaac Ware.

Bristol had its own Spa in the Hotwells at the upper end of the Clifton Gorge, a genteel, aloof community very similar to the society then flourishing at Bath. Its thermal and public buildings have nearly all perished, and one is left with charming lodging areas, now sadly gone down in the world, in such places as Dowry Square and Dowry Parade, Albemarle Row and Hope Square. But their architecture owes less to Bath than does the social need which they were built to meet; artistically they belong to the brick and stone Bristol Georgian of the merchants' quarters in Brunswick and the other squares. Bristol's architectural equivalent to Bath is the smart quarter built, in Great George Street, Berkeley Square, and elsewhere on the Brandon Hill slopes, and in the stone-faced terraces of Upper Clifton whose expansion was much blighted by the Napoleonic war. Indeed, the story, despite excellent early 19th-century buildings like the Paragon, is largely one of architectural "might have beens." The site of Windsor Terrace was to have been graced by a version of Bath's Royal Crescent, with 20 houses instead of 30, and Tyndalls Park, behind the masterly country house by James Bridges known as the Royal Fort, was to have had a series of terraces and crescents by Wyatt. As the



Arno's Castle (Horace Walpole's "Devil's Cathedral"). A fantastic Gothic blend of black slag blocks and free-stone dressings.



Neo-Grec. The Cemetery Lodges, Arno's Vale, by Charles Underwood, c. 1837-8.

scheme was got out in 1791 we have probably missed something well worth seeing.

Clifton terraces in the manner of Bath were built as late as the 1850's; they thus overlap Bristol's admirable collection of more academically Grecian buildings. Some of these were by outsiders; we have seen how Bristol boasts work by Busby, both Smirkes, and C. R. Cockerell. There were also the architects of her own school, producing both villas and more public buildings, mostly in stone or with stone facing and only to a small extent using a surface of stucco. The chief names are W. A. Armstrong, Charles Underwood, R. S. Pope, and Charles Dyer, the last with an admirable habit of signing and dating both villas like Litfield and Camp Houses, and an important public work like the Victoria Rooms (1838-40) that reminds one, on a smaller scale, of some aspects of Liverpool's St. George's Hall. The 1830's and early 1840's saw a real flowering in Bristol of the late Greek revival; we have already noticed Underwood's work at Arno's Vale. There are also the fine Ionic front of Armstrong's Brunswick Chapel and the two really notable buildings achieved in 1838-40 by R. S. Pope, the Royal Western Hotel (now Brunel House) and the Corinthian portico, dominating one side of the upper part of the Centre where there was open water a century ago, of the church built for the Irvingites that soon became what it still remains, the Catholic church of St. Mary on the Quay.

These last architects had inevitably to be bilingual in Grecian and Gothic, and the first half of the last century saw a marked overlap between the last works in the Classic or Georgian tradition and the full tide of the Gothic revival. Pope, Dyer and others worked in Gothic as well as Greek, and by 1840 Bristol had the important inspiration of two churches by Rickman to lead on to a purely Gothic school. There is also a really historic building in Highbury Chapel, built for the Congregationalists in 1842-3. For this simple Perpendicular church of austere nave and aisles in grey stone is none other than the first religious building by Butterfield (the tower and apse are later, by E. W. Godwin). His first Anglican church was also near Bristol, at Coalpit Heath in 1844-5, and he also did the chapel at Horfield Barracks. All are in the restrained, correct vein of St. Augustine's College, Canterbury; it is a fair cry to the High Anglican polychrome of his later days. The early Gothic revival in Bristol, mainly for church, charitable, or educational purposes, continued in the hands of other men. Some were local like some of the Foster family

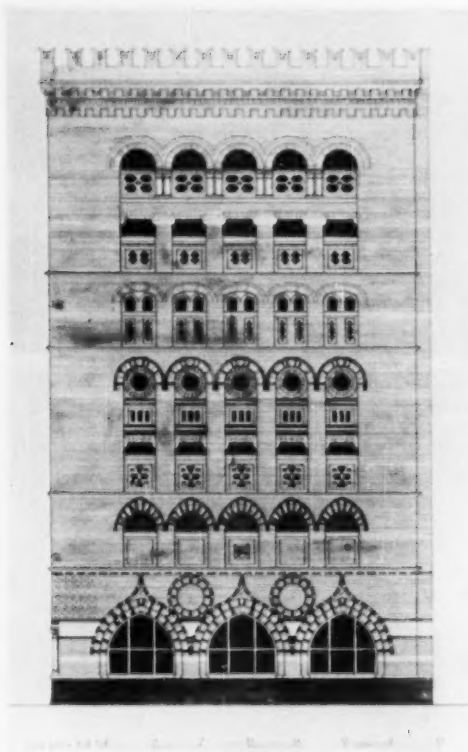


Bristol Italianate. A pair of houses, 105-7 Pembroke Road, Clifton, by Joseph Neale, c. 1861.

or the far from contemptible S. B. Gabriel, others were Londoners whose Bristol commissions were some among many. By far the best of these was John Norton, a pupil of Ferrey who was himself a fellow of Pugin, carrying on the Pugin tradition, minus iron screens, Lord Shrewsbury, and Hardman glass, but none the less with no mean distinction, particularly at St. Matthias', Stapleton, and the really noble Early English steeple of Christ Church, Clifton. But a more important figure in Bristol's Gothic revival, the source of dynamic ideas on taste and dominant figure for a time in the Bristol Society of Architects, was E. W. Godwin. With his strongly Italianate warehouses we come naturally to the last group of Bristol's buildings that must be noticed before the coming of the more modern and contemporary architects.

Bristol's most distinctive contribution to Victorian architecture is in the idiom which Mr. Summerson has dubbed "Bristol Byzantine"; in reality its inspiration seems to come less from Byzantium than from a mixture of Florence, Venice and Siena. Even where it is Gothic, the links are with Italy, and it owes nothing to the Medieval work of England or France. Hence it is a fanciful, exotic fashion, polychrome brick where not stone-faced; it gave Bristol a widely varied group of buildings and at least one masterpiece.

Characteristically enough in an age of great commercial expansion, the buildings in this Italian idiom are largely for industrial or commercial purposes—ware-



Ponton & Gough's Granary on Welsh Back. 1869.
Reproduced from a drawing by H. Godwin Arnold,
B.Arch., A.R.I.B.A.

houses, factories, a large hotel. There are a few private houses and public buildings, but only one church. The forerunner of the style may well be a remarkable building put up as early as 1841-2, the soap factory of Messrs. Christopher Thomas in Broad Plain. The Thomas family were cultured Unitarians who travelled abroad, and the factory has features, its corner turrets and battlements for example, taken direct from the Palazzo Vecchio at Florence and other buildings in Tuscany. But the heyday of "Bristol Byzantine" was not for another twenty years. Then we have it practised by the whole range of the local architectural fraternity; one suspects the influence of Godwin's taste, though his own warehouse-palazzi are restrained in colour beside some of the efforts of the late 1860's. There are the Colston Hall and Grand Hotel by John Foster and John Wood (the interactions of Fosters and Woods are a complicated part of Bristol's architectural story at this time, and the firm was very prolific). Victoria Street that leads from Temple Meads to Bristol Bridge is full of the style, for it was newly laid out when it was all the rage. There are two or three excellent examples in the famous King Street. And at the end of King Street, sited in a Venetian manner on the Welsh Back and near enough to the water for its reflection to be seen therein, is the magnificent polychrome granary put up in 1869 for Messrs. Wait & James. The designers were the most consistent leaders of the Italianate school, Archibald Ponton and William Venn Gough; they used the same divided battlements that one finds in Thomas' soap house, but the basic composition is more their own and stands as the ultimate refinement and sophistication of "Bristol Byzantine"; it is certainly one of the most notable buildings in the city. In the next year the debt to Venice was more explicitly acknowledged by Ponton in his Art Gallery at the top of Park Street. Its heraldic treatment is much as in the Granary, but the style is completely Venetian Gothic, and the building is in fact a reduced version of the Doge's Palace. It was gutted in the raids, but has now been restored as a students' refectory and staff common room for the University.

HOW TO ADD A BATHROOM TO AN EXISTING COTTAGE

by GEORGE CHALFONT St. GILES
Architect

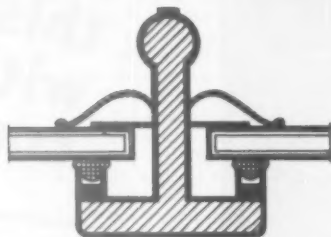
"OH! George, Mrs. Beaumont has just telephoned to ask us to her cocktail party this evening (as if I didn't know the invitations have been out for at least a month, the cat)—I was very offhand with her and told her that you had a lot of professional engagements at this time of the year. I said I would telephone, but she left it that we could do as we liked as far as she was concerned. You know, I think we ought to go."

We arrived later and I couldn't help noticing that the room was rather empty. Rusher made a bee-line for myself and Mary, but he made it obvious that he only wanted to talk to her. He is the other architect in our little community and I am sorry to say gets most of the work. He panders to the popular taste by taking a 4in. x 2in. and sawing it down the middle to make into two 4in. x 1in.'s. He then nails them into the brickwork and forms

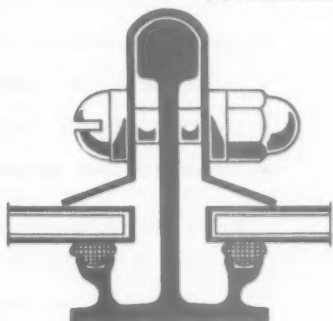
squares which he fills in with cement, and there you have a "half-timber work" house. The public love it; but now that all the small local builders are copying him I think it will eventually put him in the place he belongs. I was not in the least interested in Rusher's talk to Mary and, having had a cocktail, was ready to explore new pastures.

I spotted a fluffy nice little thing sitting alone and asked her if I could get her a cocktail, and then we sat

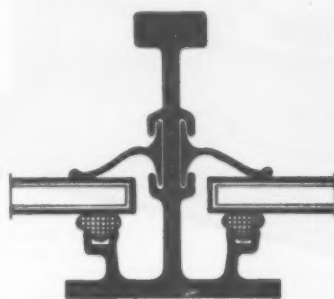
HOPE'S



THE ORIGINAL *Lead-clothed Steel Glazing Bar*
Permanent and Weathertight



THE ALTERNATIVE
Aluminium Glazing Bar
with Aluminium Capping



A COMBINATION
Aluminium Glazing Bar
with Lead Wings

Patent Glazing

HENRY HOPE & SONS LTD.
Smethwick, Birmingham & 17 Berners St., London, W.1



You may
SPECIFY
this grate
with
confidence

- 3 ESSENTIAL SERVICES FROM ONE SOURCE
- CONTINUOUS BURNING DAY and NIGHT
- HOT WATER IN CONSTANT SUPPLY
- SPACIOUS, EVENLY HEATED OVENS
- APPROVED BY THE MINISTRY OF HEALTH

Burning night and day continuously if required, the Triplex 38 C.F. grate will give reliable service and is strongly recommended for Housing Schemes. All front castings are finished in best quality Black, Shaded Green or Biscuit mottle Porcelain Enamel for ease of cleaning.

The
TRIPLEX
38 C.F. GRATE

Write for Full Details to :—

TRIPLEX FOUNDRY LTD
GREAT BRIDGE • STAFFS

down together and talked; after the third I gathered up courage to tell her I was an architect. How excited she got! "How lucky, just what my husband and I were looking for," she said, "but we didn't know where to find one. Donald, my husband, was going to ask the local labour exchange to send one up, but now I have found you, isn't it lovely?" We had more cocktails and she found out my name was George and I that she was called Flossie. I had no idea before how easily cocktails get you over the initial stages.

She bubbled it all out. She lived in the real country with an elderly husband and three children, in a cottage with only, could you believe it, one bathroom. This was all very awkward, especially when the three children, the nurse, her elderly husband all wanted the bathroom at the same time. Donald was very careless about his dress, or rather undress, and although the nurse didn't seem to mind, she was going to stop that sort of thing. It was especially awkward when all six pairs of hands, metaphorically, of course, wanted to "Pull gently" at the same time!

I told her how I would put my heart and soul into the "project" and would call to-morrow morning. It was "Good-night, Flossie" and "Good-night, George" — such an understanding little woman!

I found we were about the last to think of going. On rejoining Mary, who was still with Rusher, this new job made me feel so very superior.

Next morning, down a long lane away from everything, I found the cottage. I arrived tooting the horn and noticed an elderly man sitting in the garden reading his paper. He lowered the paper to look at me, but up it went again at once, and he took no further notice. I made quite a noise on the front door and at last she was there. But what a different Flossie from the night before!

She hardly seemed to know me and was obviously not expecting any visitors, and she kept glancing at the man sitting in the garden—then she took me over to him and introduced me as the man who had come about the bathroom from the local labour exchange. Oh! perfidious woman, but I said nothing.

Donald MacGregor was his name and he looked like it. I have found that the Scotch receive one with a stony stare and in complete silence, but after several years when you have got to know them, they embarrass you with their friendliness.

Mr. MacGregor asked me so many questions about drains, lavatories

and fees that if I was to enumerate them all there would be no room in this article for the rest of the story. At last he said he would listen to my suggestions.

The cottage was a three-bed-roomed one of the picturesque type that we have all got so tired of. There was a sloping roof over a 2ft. 6in. deep loggia that seemed to have possibilities. We went upstairs and crawled about this very small space and bumped our heads against the sloping rafters, and I noticed that none of us looked at our best in this crawling position. Then I had a "brainwave," by forming a very large dormer we could get a floor space of 6ft. x 6ft. I told him we would use a standard window—they are so easy to calculate, you take so many 1ft. 8ins. along and 1ft. upwards, and get the size 5ft. x 5ft. Mr. MacGregor was impressed but he wouldn't show it.

"This is going to be very easy, Sir" (I notice he paid attention to me when I said "Sir"). "The whole thing should cost you not much more than £75." I kept it high so as to show him a saving at the finish, then I pointed out that no licence would be required, no Town and Country Planning, no Land Act, and, as it was such a small job, I wouldn't send in anything to the Rural District Council, it was hardly worth while. Then we started planning the position of the fittings. First the bath, but the sloping ceiling came within 2ft. 6in. of the floor and it would be a little awkward getting at the taps and the waste and that nobody would be able to sit at the wrong end, but in any case it isn't worth it because the hot tap burns your shoulder. Besides, I always prefer the other end when it is vacant; but how silly of me, it would be Mr. MacGregor that would be getting his shoulder burnt! "What about a 25in. basin and towel rail?" Then a whispered conversation took place between Flossie and Mr. MacGregor and he said she didn't want it and she said she did.

It took me some time to arrive at what they were so earnestly discussing. Of course it was the w.c. and the bidet, but they didn't know the name of it. You see, they had only spent one week-end in France.

Mr. MacGregor took me aside and told me that his wife had set her heart on one of "those things" that the French women use and that she liked a very low w.c. Naturally when we rejoined Flossie neither of those things were mentioned. I felt a little nervous about getting all

these fittings into this very small space. One cannot do much with 6ft. x 6ft.

Now we came to how to get hot water to the bathroom: the existing boiler was heated from the back of a small sitting-room fire. Here I was on firm ground; what I didn't know about B.T.U.s, well, I could find it all out of a catalogue. All one wanted was a cylinder and an immersion. But just think of it, they had no electric light. Well, never mind, you can have a gas boiler, just turn it on and it does the rest. Three miles to the nearest gas main! I next suggested oil, but there was no suitable place to put the 250-gallon reservoir and I was a little vague as to how it was started. So I plumped for a large boiler with a chute from the first floor down into the top of the boiler. You would just lift a trapdoor in one of the first floor bedrooms and it would keep in day and night and require no attention (or so I thought).

Mr. MacGregor was warming to me just a little. The bidet and w.c. had broken the ice.

Before going he gave me a large whisky; that is one thing that the Scotch know how to handle. We arranged to meet the following week to choose the fittings.

I drove home feeling exhilarated. I must see to the steering-wheel, it seemed very wobbly, and at the back of my mind I felt I had been a little foolish in saying it would only cost £75; after all, you can pay that for a bath.

The specification was a masterpiece. I copied out pages and pages of general clauses from the "Ideal Specification" and when it came to construction and plumbing I put everything down, while the drains were a model of perfection. I was surprised at its length, but I was out to show Mr. MacGregor that I knew my job.

I met Flossie the following week at one of those showrooms which have countless fitted up bathrooms. She was amazed but rose to the occasion and chose a complete room in purple for £369 12s. 8d. She said it would be all right as she knew how to manage Donald.

The specifications went out to three local builders and came in on a Tuesday. The lowest estimate was for £1,160. The following day I was sacked!

Some months after Mrs. Beaumont told Mary that she had been over seeing the MacGregors and that they had got such a nice little new bathroom.

ARCHITECT & BUILDING NEWS DETAIL SHEETS

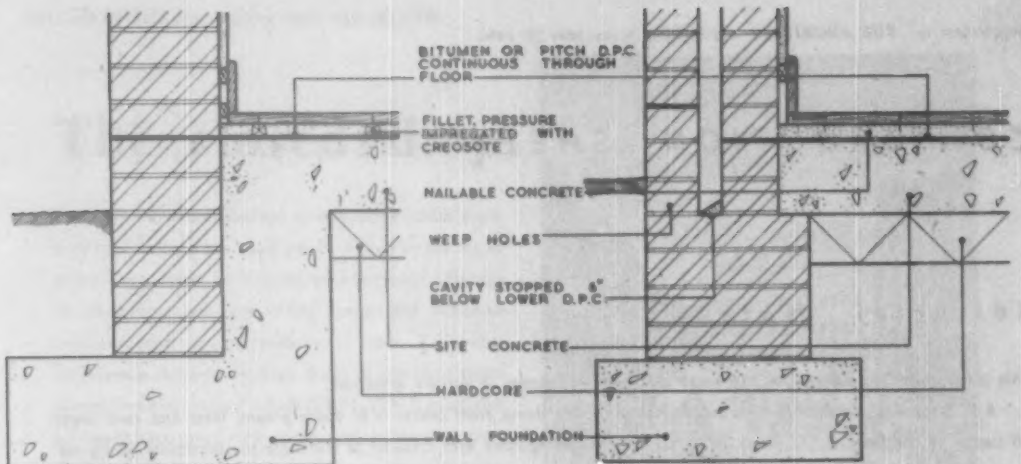
Edited by Edward D. Mills, F.R.I.B.A., F.R.S.A.

Reprints of the first fifty detail sheets which appeared in the A. & B.N. from 25.6.1948 to 17.6.1949, will be ready shortly. Now is the time to order from the Publishing Department, Architect & Building News, Dorset House, Stamford Street, S.E.1. Price for the set of fifty with index: 7/6, or 12/6 in folder.

The list of subjects and names of the architects is given below.

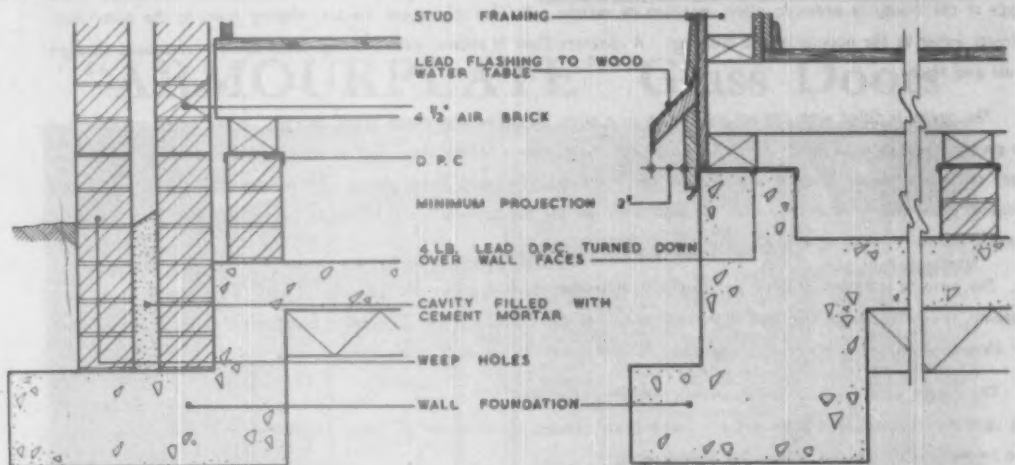
Sheets 1-50

	Author	Number
Aluminium Flagmast, Coventry ...	D. E. E. Gibson ...	A.1. C.17.
Balcony, Monks Park Flats, Coventry ...	D. E. E. Gibson ...	A.2. E.6.
Porch, Little Baddow, Essex ...	Roff Marsh ...	A.3. E.5.
Bedroom Fittings, Little Baddow ...	Roff Marsh ...	A.4. E.13.
Lampstandard, Broadgate, Coventry ...	D. E. E. Gibson ...	A.5. C.17.
Bar Counter, Youth Centre, Redhill ...	Edward D. Mills ...	A.6. F.13.
Service Bar, Tea Centre ...	Misha Black ...	A.7. K.13.
Flower Boxes, The Tea Centre ...	Misha Black ...	A.8. K.13.
Fireplace, Bungalow, Sutton ...	Bronek Katz & R. Vaughan ...	A.9. E.8.
Porch, B.I.S.F. House, Type B ...	Frederick Gibberd ...	A.10.E.5.
Porch, B.I.S.F. House, Type A ...	Donovan H. Lee (Engineer) ...	A.11.E.5.
Porch, B.I.S.F. House, Type A.I ...	Donovan H. Lee (Engineer) ...	A.12.E.5.
Wall Detail, Factory Building, Dagenham ...	Edward D. Mills ...	A.13.A.2.
Exhibition Information Desk ...	Misha Black ...	A.14.K.13.
Bedroom Window, House in Highgate ...	Taylor & Green ...	A.15.E.6.
Bedroom Fittings, House in Highgate ...	Taylor & Green ...	A.16.E.13.
Bedroom Window, House in Highgate ...	Taylor & Green ...	A.17.E.6.
Reception Desk, Methuen's, Essex Street ...	Bronek Katz & R. Vaughan ...	A.18.D.13.
Porch, House in Highgate ...	Taylor & Green ...	A.19.E.5.
Entrance B.I.F. 1948 ...	Maxwell Fry & Jane Drew ...	A.20.K.5.
C.O.I. Crisis, Charing Cross Exhibition ...	Misha Black ...	A.21.K.17.
Porch, Sandringham Road Housing Scheme, Hackney ...	Norman & Dawbarn ...	A.22.E.5.
Balcony, Sandringham Road Housing Scheme, Hackney ...	Norman & Dawbarn ...	A.23.E.6.
Garden Shelter, Sandringham Road Housing Scheme ...	Norman & Dawbarn ...	A.24.F.17.
Windows, Residences, Lagos, Nigeria ...	Edward D. Mills ...	A.25.E.6.
Porch, Flats at Whitton, Middsx. ...	Eric Lyons & G. Paulson Townsend ...	A.26.E.5.
Window, Flats at Whitton, Middsx. ...	Eric Lyons & G. Paulson Townsend ...	A.27.E.6.
Furniture Details, Westminster Library ...	Riches & Blythin ...	A.28.C.13.
Counter Details, Danish Travel Bureau, London ...	Korbing, Hvidt & Nielsen ...	A.29.B.13.
Panel, Danish Travel Bureau, London ...	Korbing, Hvidt & Nielsen ...	A.30.B.13.
Kitchen, House in Highbury Park ...	Edward D. Mills ...	A.31.E.17.
Fireplace, House in Highbury Park ...	Edward D. Mills ...	A.32.E.8.
Shopfront, St. Mary's Street, Weymouth ...	E. Wamsley Lewis ...	A.33.B.6.
Lighting Improvement, Tea Tasting Room, Calcutta ...	C. J. Parker ...	A.34.A.6.
Window, House at Birdham, Sussex ...	Davies & Moro ...	A.35.E.6.
Staircase, House at Birdham, Sussex ...	Davies & Moro ...	A.36.E.7.
Petroleum Information Bureau Stand, Royal Agricultural Show, York ...	Brian Peake of Design Research Unit ...	A.37.K.17.
Wall Detail, School in Georgetown, British Guiana ...	L. De Syllas ...	A.38.D.2.
Reception Desk, British Rayon Industry Design Centre ...	E. Maxwell Fry & Jane Drew ...	A.39.K.13.
Two Display Panels, British Rayon Industry Design Centre ...	E. Maxwell Fry & Jane Drew ...	A.40.K.13.
Staircase Detail, 5, Bentinck Street, London ...	Hall, Easton & Robertson ...	A.41.D.7.
Counter Details, Shop in Newman Street, London ...	Patrick Gwynne ...	A.42.B.13.
Record Racking, Shop in Newman Street, London ...	Patrick Gwynne ...	A.43.B.13.
Memorial Seat, Weybridge, Surrey ...	P. J. Westwood & Sons ...	A.44.F.13.
Wall Detail, House in Beaconsfield ...	June Park ...	A.45.E.2.
Staircase, House in Southwood Lane, Highgate ...	Martin Furniss ...	A.46.E.7.
Staircase, Residences, Lagos, Nigeria ...	Edward D. Mills ...	A.47.E.7.
Fireplace, Penthouse Flat, Ladbroke Grove ...	Myerscough-Walker ...	A.48.E.8.
Staircase, Showroom in Bromley, Kent ...	Bertram Carter ...	A.49.K.7.
Fume Cupboard, Laboratory, Scunthorpe, Lincs. ...	Frederick Gibberd ...	A.50.A.15.



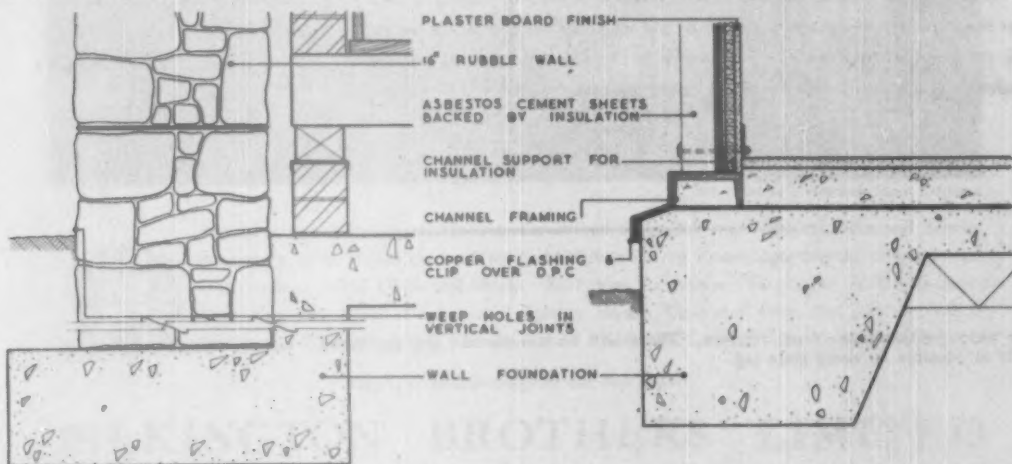
① SOLID 9" BRICK WALL

② CAVITY WALL SOLID GROUND FLOOR



③ CAVITY WALL TIMBER FLOOR

④ TIMBER FRAMED BUILDING, TIMBER FLOOR.



⑤ RUBBLE WALL CAVITY CONSTRUCTION

⑥ BUILT UP WALL UNIT OF ASBESTOS CEMENT SHEETS & CHANNEL FRAMING

SCALE: 1" TO 1' 0"

CONSTRUCTION SHEET L.2., C.14.

Editorial Notes

This sheet shows six details for the construction of wall bases in various materials.

1. A 9" brick wall is built off a normal foundation. The damp proof course is 6" above ground level and runs under all timber in the floor. The fillets set in screed are impregnated with creosote to eliminate the possibility of dry rot.
2. The cavity is closed 6" below the lowest damp proof course. Weep holes are provided in the vertical joints at the base of the cavity in order to allow moisture to escape. A fillet of cement mortar, sloping towards the outer leaf, directs water to the outside of the building. A concrete floor is shown, with a damp proof course continuous through wall and floor.
3. The cavity is filled with cement mortar up to a point 6" below the damp proof course. Weep holes are provided at ground level to allow water to escape. An air brick is built in the inner leaf to allow circulation of air round the floor timbers. No air brick is provided for the outer leaf, the weep holes giving sufficient ventilation to the cavity. A damp proof course is shown under the wall plate on the sleeper wall, and is lapped over the edges of the wall to prevent moisture reaching the wall plate.
4. The base to a timber framed building with a timber floor is given in Figure 4. A wood water table, with lead flashing, is constructed at the base of the wall to throw water clear of the concrete. Damp proof courses are provided for sleeper walls below all floor timbers and for base walls at least 6" above ground level.
5. The rubble wall construction shown has an inner leaf of 4½" brickwork. Weep holes are provided at the base of the cavity and ventilate it sufficiently. Damp proof courses are provided 6" above ground level for the external wall and immediately below all timber for sleeper walls.
6. A built up wall unit of asbestos cement sheets with channel framing is detailed. A flashing of copper is provided over the channel framing and is taken over and round the damp proof course which is provided to prevent water rising into the structure from the soil. Insulation to the wall is fixed to a steel channel and the asbestos cement sheets, insulation, and plaster board finish, are bolted together.

We welcome comments from readers. These will be summarised and published. Letters should reach us as early as possible to avoid time lag.

The closed shop

The only difference between a shop door and a house door used to be a few small panes of glass in the upper part of the former; both doors were shut, and although the shop door was not locked against the would-be customer, there was no invitation to enter. Today that invitation is supplied by large doors of sparkling transparent, shock-resisting "ARMOURPLATE" glass, that give an uninterrupted view of the inside of the shop from the street, and swing back at a touch to admit customers. Make the shop brighter and better by opening it up with



Fenchurch Street in the late 17th Century

"ARMOURPLATE" Glass Doors



Brown's Furniture Store, Leicester



Architects and Architectural Students are invited to consult our Technical Sales and Service Department at St. Helens, or our West End Office at Selwyn House, regarding the properties and uses of glass. Head Office and Works: St. Helens, Lancashire. Telephone: St. Helens 4001. West End Office and Showrooms: Selwyn House, Cleveland Row, St. James's, S.W.1. Telephone: Whitehall 5672-6. Send for the "ARMOURPLATE" Glass Doors booklet.

Supplies are available through the usual trade channels

PILKINGTON BROTHERS LIMITED

"ARMOURPLATE" is the registered trade mark of Pilkington Brothers Limited

PRIMARY BUILDING SUPPLIES

A comprehensive service for Scotland

BRICKS

WASHED SAND & GRAVEL

Composition brick in standard size produced in our own brickfields and delivered to all parts of Scotland and for shipment to The Isles and Northern Ireland.

WORKS AT:

SUMMERSTON, GLASGOW, N.W.

BLACKHILL, GLASGOW, N.W.

BISHOPBRIGGS, GLASGOW, N.W.

HOLYTOWN, LANARKSHIRE.

Supplied either in standard grades or to special specification

QUARRIES: GLASGOW, EDINBURGH, DUMBARTONSHIRE,
DUNDEE, LONDON

GROUND LIMESTONE, STONE, GRANITE

Quarry: Wester Bleaton,
near Blairgowrie.

Crushed
and Tarred.

Crushed, Sets,
Aggregates, etc.

Associate Company: SCOTTISH CEMENT SALES LTD.,

All brands of Portland and Coloured Cements.

KEIR & CAWDER LTD.

Brickmakers

Quarrymasters

Builders' Merchants

109, HOPE STREET, GLASGOW, C.2.

Telephone: CENTRAL 0081/8

Telegrams: "GRAVEL, GLASGOW."

LONDON OFFICE: 9 UPPER GROSVENOR STREET, W.1. Phone: MAYFAIR 8766/9

Donald Clerk & Son Limited

Design, fabricate and erect
Factories, Garages, Gantries,
Schools, Offices, Farm Buildings
and all types of steel structures

STRUCTURAL STEELWORK

Main Workshop, Queenslie Industrial Estate, Scottish
Industrial Estates Ltd.

Seventeen Standard Factory Bays, Queenslie Industrial
Estate, Scottish Industrial Estates Ltd.




CALEDONIAN STEEL WORKS
RUTHERGLEN GLASGOW
Telephone: Rutherford 2201 (7 lines) Telegrams: Versatile, Glasgow

RIPPER

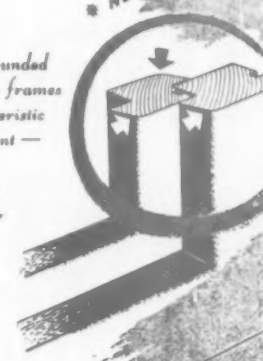
standard windows

to **EJMA**
and **B.S. 1**
specifications



* A typical two light window showing the alternative glazing arrangements now available throughout the entire range.

◆ The neatly rounded Arrises on these frames typifies a characteristic Ripper refinement — indication of the thought and care applied to all our productions.



RIPPERS Limited
Castle Hedingham Essex

TELEPHONE HEDINGHAM 191 (4 lines)

LONDON — 9 Southampton Place (Suite 16) W.C.1

TELEPHONE CHANCERY 8306/7

FIRE-ESCAPE STAIRS



Fire-escapes are made by the Lion Foundry to suit any type of building, hospital, hotel, factory, office, house. They can be made of the "straight" type as shown on this photograph or of the "spiral" type.

The cast-iron treads and landings ensure a life as long as the building itself. Cast lasts.

The fire-escape stairs shown here are typical of many made and erected by Lion Foundries.

Inquiries regarding Fire-escape Stairs should be addressed to:—

DEPT. A.

LION FOUNDRY CO. LTD.

ARCHITECTURAL & SANITARY IRONFOUNDERS

CONTRACTORS TO H.M. GOVERNMENT.

KIRKINTILLOCH Near GLASGOW

London Office—124, Victoria Street, S.W. 1.

Telephone—Victoria 9148

Typical Heavy Duty Installations by

Jackson

(No. 4)



Kitchen at British Electricity Authority Headquarters

The Jackson Electric Stove Co. Ltd. are proud to announce that the principal kitchen at B.E.A. Headquarters is Jackson equipped. The illustration shows a section of the main kitchen and the following: Jackson equipment specially finished in cream and black high quality vitreous enamel — a two-Pan Fish Fryer, Steaming Oven, Grill, Hot Cupboard and a No. 6D Double Oven Cooker. In addition a 10 ft. Hot Cupboard is installed in the servery.

The equipment serves a dining-room for a maximum of 100 persons and the total loading is 76 kW.

Jackson

**BOILING PANS • BAINS MARIE
CHEFS' RANGES • GRILLS • HOT
CUPBOARDS • STEAMING OVENS
FISH FRYERS • URNS • PASTRY
OVENS • ROASTING OVENS**

THE JACKSON ELECTRIC STOVE CO. LIMITED, 143 SLOANE STREET, LONDON, S.W.1. SLOane 6248

Chartermatt Wall Paint

The perfect Flat Oil finish. Dries quickly and will withstand constant washing. In attractive pastel tints. Shade cards and literature from

CHARLES TURNER & SON, LTD.

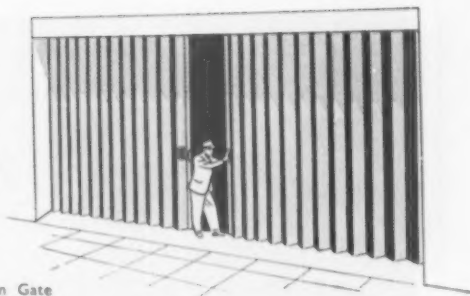
Bloomsbury House

165, HIGH HOLBORN - - LONDON, W.C.1



A gate for every purpose

Whatever the 'opening' there is a Bolton Gate to fill it! Our gates are precision built throughout which ensures the lasting efficiency and constant ease of operation for which Bolton Gates are renowned the world over. Whether hand, power or ray-operated they offer the solution to your gate problem — write now for further information.



LONDON OFFICE:
248 Perth Road,
Ilford, Essex

BOLTON
COLLAPSIBLE GATES

BOLTON GATE COMPANY LIMITED, BOLTON, LANCs

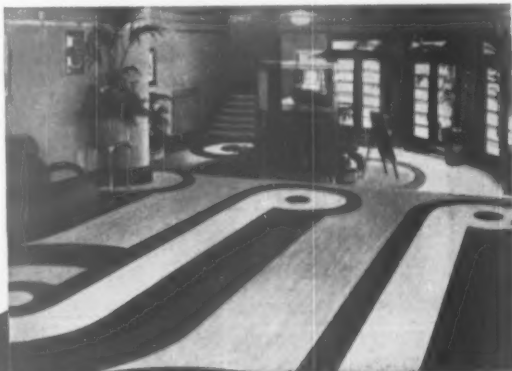
dm BG 36

*Fine buildings
made finer
with decorative,
durable*

**HAREFIELD
RUBBER
FLOORING**



Harefield Rubber Flooring is made in rolls up to 6" wide, and in thicknesses of $\frac{1}{8}$ ", $\frac{3}{16}$ ", $\frac{1}{4}$ " and $\frac{1}{2}$ ".



The rich and dignified beauty of Harefield Rubber Flooring and its soft resilience make buildings more pleasant to live and work in.

Harefield Rubber Flooring, which is available in a wide range of high quality designs to harmonise with any colour scheme, is the modern flooring for offices, hotels, cinemas, churches, hospitals, etc. Enquiries from architects and builders are welcomed. Our experience is at your service.

RUBBERWARE LTD., BELL WORKS, HAREFIELD, MIDDLESEX.



This is a Carron product made by modern Carron processes embodying the Carron tradition for fine workmanship begun in 1759.



CARRON 'BEN LAWERS' CONVECTOR GRATE

Fitted closure plate for overnight burning • Special fire front with spinwheel air control • Convection heating to same room through grid in mantel front • Combined cast-iron hearthplate and kerb • Supplied with high-pressure boiler • Provided with removable plate for easy access to boiler connections • Enamelled in standard colours. Write for full details.

CARRON COMPANY • CARRON • FALKIRK • SCOTLAND

Showrooms and Offices: 15 Upper Thames Street, London, E.C.4.
22-26 Redcross St., Liverpool, 1. 125 Buchanan St., Glasgow, C.1.
Office: 14 Ridgfield, Manchester, 2.



F3

"WE'LL GET OFF
AT THE FOURTH
FLOOR AND SEE
OUR NEW
ACCOUNTS DEPT.
ALL THE
PARTITIONS
& FURNITURE
ARE **STEEL** BY
Sankey-Sheldon
OF COURSE"



Sankey-Sheldon Limited, 46 Cannon St., London, E.C.4

APAC PRODUCTS

for decoration

DEXAPAC Oil-Bound Water Paint

The oil-bound flat wall finish for interior and exterior use where the highest grade work is required. Made under controlled conditions by a patented process, giving ease of application combined with faultless appearance.

DEZWYTE Zinc White Undercoating

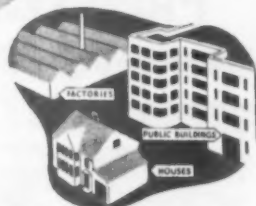
A first-class general purpose undercoating of maximum covering power. It is easy to apply and gives a good foundation for the final coat.

APAC Durable Gloss Paint

Especially suitable for the home decorator. It is easy to apply and dries with a hard glossy surface. Obtainable in an attractive colour range.

KEMAPAC Enamel

Kemapac, a new enamel finish, is specially designed for the exteriors of houses, factories, schools and public buildings. It dries in 8-10 hours to give a tough, resistant film, far exceeding hard gloss paints in durability and covering power.



ALLIED PAINTS & CHEMICALS LTD

WHARFDALE ROAD, TYSELEY, BIRMINGHAM 11



'AIR-MAZE'

OIL WETTED AIR FILTRATION PANELS

DUST HOLDING—

a panel 20" x 20" x 2", will hold 660 grams of collected material before servicing is required.

CAPACITY—

from 60 to 1440 cubic feet of air per minute for an individual panel; multiple installations to meet any demands.

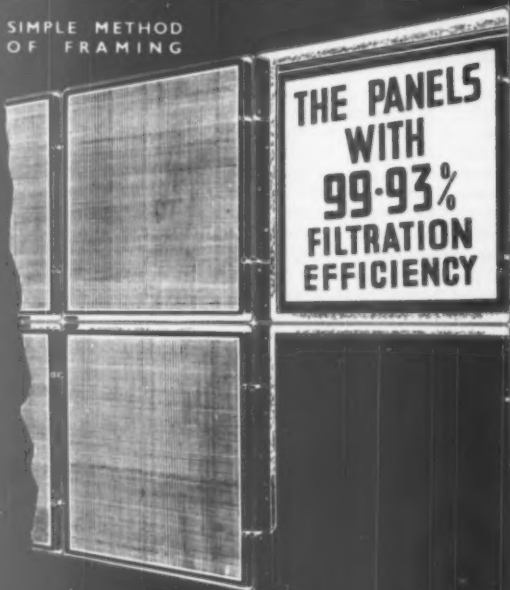
INITIAL RESISTANCE—

for a 2 panel—0.10 W.G. at 288 f.p.m.

SERVICING—

without any special apparatus or materials, swirl the panel in hot water and then immerse in any light engine oil.

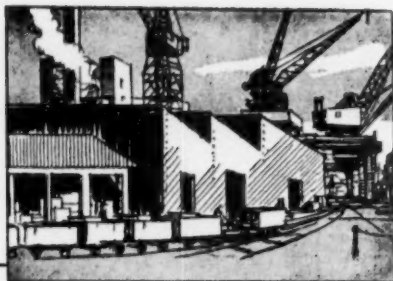
SIMPLE METHOD OF FRAMING



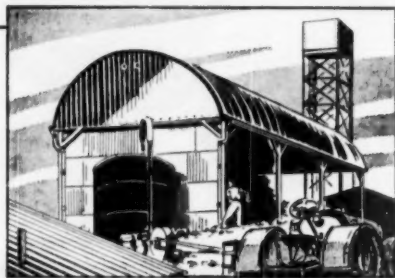
AIR-MAZE

(GREAT BRITAIN) LIMITED

CHURCH STREET • WARRINGTON • LANCs.



LASTING PROTECTION *for Iron and Steel*



**This highly efficient bituminous paint
saves more than it costs**

THE best way to keep metal from rusting is to give it a covering of Presomet. This flexible, bituminous black paint can be applied by brush, spray, or by dipping, and flows exceptionally smoothly; its great covering capacity makes it very economical. It dries quickly, to form a glossy, durable surface that keeps off any weather and resists wear and rough treatment.

Presomet is thus an efficient protection for all outside metal-work—gutters, pipes, railings, fire-escapes, ventilation ducts and cowl, corrugated iron roofing, etc. It is also widely used for treating timber, concrete, asbestos, and felt—in fact, any outdoor surface exposed to wet and weather. The cost is negligible compared with the resultant saving.

Three grades (light, medium, heavy) available in gallon and 4-gallon cans and 5, 10, and 40-gallon drums.

NCB

PRESOMET

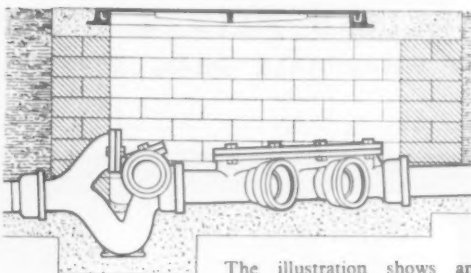
Manufactured by the
National Coal Board

Presomet is a product of British Coal. Further details, and advice on any technical problem, will gladly be given on application to the National Coal Board, By-Products, N. P. Bank Buildings, Docks, Cardiff

IMPORTANT TO ARCHITECTS, BUILDERS AND SANITARY ENGINEERS

Let us help you to solve your Sanitary, Sewage and Drainage Engineering problems

Before submitting plans and specifications for that new job, talk it over with our Technical Department. They are at the service of our clients to advise both on technical matters and on the requirements of local authorities and the by-laws.



The illustration shows an inspection chamber and intercepting trap (provided with a flanged clearing arm and cover) constructed from standard parts supplied by Burn Bros. A separate cover gives access to the trap and a side socket connects with a fresh-air outlet.

Burn Bros. hold over 100,000 castings and are the largest stockists in the country. Most fittings are available for prompt delivery.

BURN BROS

(LONDON) LTD.

DRAINAGE AND SANITARY ENGINEERS
MANUFACTURERS OF DRAIN TESTING APPLIANCES

6 STAMFORD ST., BLACKFRIARS, LONDON, S.E.1

Telephone: WATERloo 5261



Electric Lifts

*incomparable
in performance*

In every branch of industry, from fine cars to fine china, there is one name which is generally accepted as a criterion of careful design and craftsmanship.

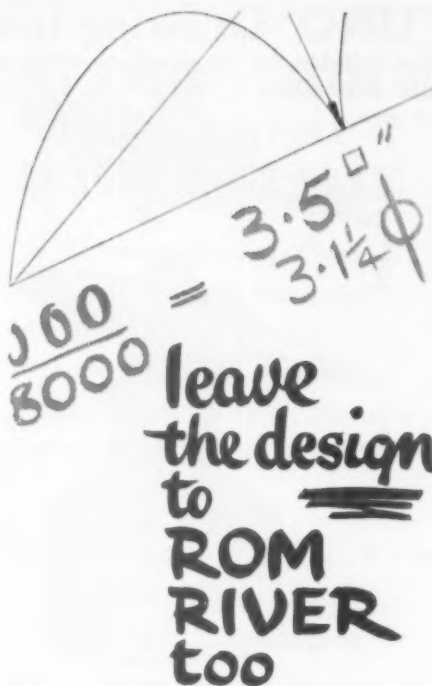
It ill becomes us to say who makes a comparable lift, but we do claim to take great care to ensure that every E. C. M. Lift is well - designed, and sturdily made, and that it will give long and trouble-free service wherever it may be installed.

ETCHELLS, CONGDON & MUIR
Limited

ANCOATS · MANCHESTER · ENGLAND

ECM7

FIVE



The Rom River Reinforcement Service, who also supply, bend and fix, bring to the designing of concrete reinforcement not only their specialised knowledge of this work but first hand knowledge of the steel supply position and the ability to supply from their own large stocks. Thus Rom River designs eliminate the possibility of delay in implementing your plans through non-availability of material.

ROM RIVER
reinforcement service

design . . . supply . . . bending . . . fixing

THE ROM RIVER CO. LTD., 1-15 Woburn Place, London, W.C.1
Telephone: TElbourne 7877, Telegrams: ROMRIVER, Woburn, London

S.A. 3178

"UNO" Drawing Inks

are suitable for all drawing office use and every class of pen



A. WEST & PARTNERS, LTD.
36 BROADWAY, WESTMINSTER S.W.1.

Fire Automatically Sealed!



with

CURFEW FIREPROOF DOORS

CURFEW WORKS, ANCOATS, MANCHESTER 4

Tel: COLlyhurst 2018

TUDOR WORKS, PARK ROYAL N.W.10 Tel: ELGAR 6954

Two useful books published for "THE ARCHITECT & Building News"

TRAFFIC SURVEYS

Practical Methods for Planners
and Road Engineers

By R. B. HOUNSFIELD,

B.A. (Cantab.), A.M.I.C.E., A.M.Inst.T.

THE solution of many problems in town and country planning depends upon a clear understanding of traffic flow. To be able to answer the many questions that arise about traffic it is usually (but not always) necessary to take an accurate traffic census.

This book on traffic surveys is a practical guide. It shows what information usually already exists, how to obtain and collect the necessary additional information, how to emphasize it and how to present it. It also shows that the taking of a traffic census is within the scope of many with restricted labour and financial resources.

47 pp. 17 illus. 10 tables. 3s. 6d. net. By post 3s. 8d.

BASIC SURVEYS FOR PLANNING

Edited for The Association for Planning
and Regional Reconstruction by Jacqueline

TYRWHITT, A.I.L.A., A.M.T.P.I., and W. L.

WAIDE, D.T.P. (London), A.M.T.P.I.

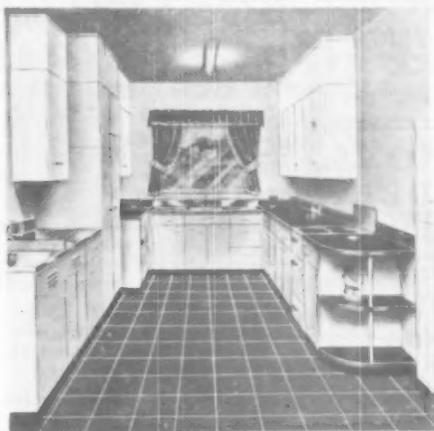
THIS book presents an account of the attempt by specialists in conference with Kent County officers to outline a scheme for surveys satisfying the requirements of the 1947 Town Planning Act. The group, although deriving its inspiration from the Kent problems, has presented its work in a form intended for universal application and covering the requirements of both urban and country planning. The approach is simple and direct, and all those concerned with the preparation of planning surveys—whether at home or abroad—will find this work of particular value. A comprehensive index is included.

42 pp. 3 fold-in illustrations. 5s. net. By post 5s. 3d.

Obtainable at leading booksellers everywhere, or direct from:

ILIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1



3 ins. MAKE A BIG DIFFERENCE**AN EZEZ KITCHEN***for old or new houses*

Ezee Kitchen sinks and counter units are 24 in. deep from back to front (not 21 in. or even 18 in.) and so provide ample working and storage space.

Ezee Kitchen units are not loose pieces of furniture which allow dust to collect at their backs, but are secured to the wall and fixed together to form one flush-fitting unit extending for any length of wall space.

Write for our latest Brochure T.2. and Full Trade Terms.

EZEZ KITCHENS LIMITED

341A SAUCHIEHALL ST., GLASGOW. Tel: Douglas 4956

London Showroom: 8 Lansdowne Row, W.1. Grosvenor 5068



Made in
Size 12"
to 27" dia.

Please quote ABN/13

Put Air to Work**MATTHEWS & YATES LTD**

(Member of the Fan Manufacturers Association Ltd.)

Heating and Ventilating Engineers

SWINTON (MANCHESTER) and LONDON

Telephone: SWINTON 2273 (4 lines)

LONDON, CHANCERY 7833 (3 lines)

GLASGOW · LEEDS · BIRMINGHAM · CARDIFF

'CALLOW ROCK'

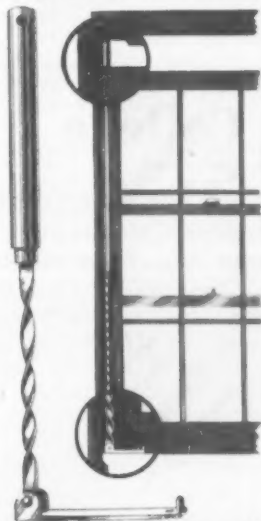
Gas-burnt WHITE LIME

is a Non-hydraulic, Class A
Quicklime for Plastering
Finishing Coat, Coarse Stuff
and Building Mortar,
conforming to British Standard
Specification No. 890-1940

**The Callow Rock Lime
Company, Ltd.**
Cheddar, Somerset

"UNIQUE" Spiral BALANCE

(OVER 100 MILLION IN USE)



The "Unique" Spiral Window Balance for Double Hung Windows has many practical advantages which will be appreciated by the builder and the architect. They are readily available, easily installed and make a substantial saving in timber possible.

The price per set for standard sized windows is 14/6d. Please write to address below for details.

UNIQUE BALANCE CO., LTD.
YEovil · SOMERSET

EVANS LIFTS

ABBEY LANE, LEICESTER.

London Office:

66 VICTORIA STREET, S.W.1.

ARCHITECTS' PLAN CHESTS
STEEL & WOOD OFFICE DESKS, FILING
CABINETS, CUPBOARDS, BOOKCASES
BOARDROOM & WRITING TABLES, REVOLVING
CHAIRS, CARPETS & LINO. HUGE STOCKS

M. MARGOLIS,

378-380, EUSTON ROAD, N.W.1, Euston 1325

**RINGMER BUILDING
WORKS, LTD.**

BUILDERS & CONTRACTORS

Joinery Specialists.

RINGMER : LEWES : SUSSEX

Telephone: Lewes 300.



ENGERT & ROLFE LTD.
**INODOROUS FELTS
FROM STOCK**
POPLAR E.14. EAST 1441

**ANDERSON'S
"DURODEK"**

ROOFING SYSTEM

D. ANDERSON & SON LTD., Stratford, Manchester

ENGERT & ROLFE LTD.
COPPERTRINDA

The best Dampcourse yet produced

POPLAR, E.14. EAST 1441



**INSULATING
BOARD AND
HARDBOARD**
Made in Canada

TENTEST FIBRE BOARD CO., LIMITED75, Crescent West, Hadley Wood, Barnet, Herts.
Phone: Barnet 5501 (5 lines)**BOSTWICK
METALWORK**OF EVERY DESCRIPTION &
OUTSTANDING EXCELLENCE**BOSTWICK GATE & Co. Ltd.**

SHUTTER

Original Patents of the Collapsible Gate.

HYTHE ROAD, WILLESDEN, N.W.13

Telephone: LADbrake 3661

QUALIFYING EXAMINATIONS

R.I.B.A. & T.P.I.Courses of Instruction by
Correspondence and

Personal Tuition in Studio

including TESTIMONIES of STUDY
AND PROFESSIONAL PRACTICE**C. W. BOX, F.R.I.B.A.**

A.J.STRUCT.E., M.R.SAN.J.

115 Gower Street, W.C.1.

Telephone: EUSTON 3906

PRE-CAST CONCRETE UNITS

TO HIGHEST SPECIFICATIONS

HOLLOWS - CURBS - SLABS, ETC.**PRE-CAST BEAMS ON "MYKO" SYSTEM****THE BATH & PORTLAND STONE FIRMS LTD.****BATH (Head Office)**

Telephone 3248-9

PORTLAND (Works)

Telephone 311

LONDON OFFICE—Grosvenor Gardens House, S.W.1. Tel: Victoria 9182-3

College

of

Estate Management

(Incorporated by Royal Charter)

11, Great George St., Westminster, S.W.1

Complete Courses of Preparation for the Examinations of:—

ROYAL INSTITUTION OF CHARTERED SURVEYORS.

AUCTIONEERS' AND ESTATE AGENTS' INSTITUTE.

LAND AGENTS SOCIETY.

INSTITUTION OF MUNICIPAL & COUNTY ENGINEERS.

TOWN PLANNING INSTITUTE.

ROYAL SANITARY INSTITUTE.

B.Sc., UNIVERSITY OF LONDON.

By Postal Tuition.

Whole-time and Evening Class Tuition for certain Examinations.

Apply The Secretary.

Telephone Whitehall 2716.

STEELWORK

BY

R. W. SHARMAN LTD

HEAD OFFICE:

The Parade, SUNBURY-on-THAMES, Middx.

Telephone Sunbury 3218.

Telegraphic (Sharman, Sunbury).

(all communications to be addressed to above).

WORKS Swan Works, Hanworth, Middlesex.

and at Hayes, Middlesex.

Telephone Feltbam 3407.

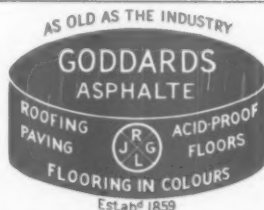
ENGLISH TIMBERSfor Building and Joinery Trades, Oak Planks
for Gills, Half-timbering, or scantling to size.Architects' designs for Panelling and
exclusive furniture faithfully interpreted.**GATES AND OAK DOORS
A SPECIALITY**Seasoned quartered boards for Flooring
Panelling, etc. Machining done and joinery
manufactured for the trade. Gates and Fencing.

Established 1884.

WYCKHAMBLACKWELL LTD.

Hampton-in-Arden, BIRMINGHAM

Telephone: HAMPTON-IN-ARDEN 3.

**R. J. GODDARD & CO LTD** LONDON, N.7
Telephone: NORTH 3037 (3 lines)

A NEW HINGE



by the makers of the famous

**"SECRET
PIN"**

BALDWIN'S

Cast iron
butt hinges

Sole Manufacturers:

BALDWIN, SON & CO. LTD., STOURPORT-ON-SEVERN

Baldwin's new variation of the famous 'No. 200' combines the advantages of machine moulding with a sealed pin which is impervious to moisture and consequent rust, ensuring perfect fit and smooth opening and closing. Patent 22741/48.

M-W-57

THOS.

WRAGG & SONS

LIMITED

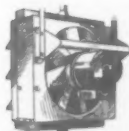
Manufacturers of

ENAMELLED SANITARY FIRECLAY.
GLAZED BRICKS & TILES, ALL
COLOURS. STONEWARE PIPES &
FITTINGS. FIREBRICKS.

SWADLINCOTE, Head Office: BURTON-ON-TRENT
Nr.

39, VICTORIA STREET, London Office: WESTMINSTER, S.W.1.

Using Steam or Hot Water



UNIT AND
PLENUM TYPE

AIR HEATERS

THE SPIRAL TUBE & COMPONENTS CO., LTD
Osmaston Park Road, DERBY
London Office: Honeypet Lane, Stanmore, Middlesex

KINNEAR PATENT STEEL ROLLING SHUTTERS

The term "Rolling Shutters" is merely a general description, but the word "Kinnear" prefixed adds a significance which carries with it the assurance of superiority and service.

Sole Manufacturers:—

ARTHUR L. GIBSON & CO. LTD.,
TWICKENHAM.

Folders for A & B N Detail Sheets



"I KNOW WE'VE GOT A DETAIL
OF THAT SOMEWHERE!"

But where? The best way to file your A. & B.N. Detail Sheets so that you can put your hand on the one you want in a matter of seconds, is in a folder specially designed to hold them, clearly labelled on the spine for quick reference in the bookshelf.

Serviceable folders in double duplex manilla, with pocket to hold one year's issue of sheets, may be ordered now. Price 5/—, postage 6d. extra, from:—

Publishing Department:
"THE ARCHITECT AND BUILDING NEWS,"
Dorset House, Stamford Street, London, S.E.1

Unistuc Liquid Stone

The modern economical treatment for the preservation and decoration of exterior cement, stone, concrete, brick and plaster surfaces.

THE UNITED PAINT CO. LTD
15, St. Helens Place, London, E.C.3.

LIVERPOOL

NEWCASTLE-ON-TYNE

CARDIFF, ETC.

CLASSIFIED ADVERTISEMENTS.

Rate: 1/6 per line, minimum 3/- average line 6 words. Each paragraph charged separately. Box Nos.: add 6 words, plus 1/- for registration and forwarding replies. Press day: Monday. Remittances payable to **ILIFFE & SONS LTD.** No responsibility accepted for errors.

OFFICIAL ANNOUNCEMENTS

CITY OF BRADFORD.

CITY ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF TECHNICAL STAFF (PLANNING).

APPLICATIONS are invited for the following appointments in accordance with the National Scale of Salaries on the grades indicated.

- (a) Post No. 14. SENIOR PLANNING ASSISTANT. A.P.T. VII. £635-710.
- (b) Post No. 15. SENIOR PLANNING ASSISTANT. A.P.T. VI. £595-660.
- (c) Post No. 16. SENIOR PLANNING ASSISTANT. A.P.T. VI. £595-660.
- (d) Post No. 32. PLANNING ASSISTANT. A.P.T. III-V. £450-570.
- (e) Post No. 55. JUNIOR PLANNING ASSISTANT. A.P.T. I-IV. £390-525.
- (f) Post No. 56. DRAUGHTSMAN. A.P.T. I. £390-475.
- (g) Post No. 57. JUNIOR PLANNING ASSISTANT. A.P.T. I-IV. £390-525.

Where more than one grade is shown for any post, successful candidates will be appointed on the appropriate grade depending on their qualifications and experience and strictly in accordance with the National Scheme of Conditions of Service. In addition to general planning, engineering or architectural experience, applicants for the various posts should preferably have had particular experience as shown below, should preferably hold a recognised engineering, architectural or surveying qualification and must hold the qualifications indicated.

(a) Applicants for this post must be Associate Members of the Town Planning Institute, should preferably hold an Engineering Degree and in addition to Survey and Research experience should have taken a responsible part in the preparation of Development Plans.

(b) and (c) Preparation of Development Plans. A.M.T.P.I. (Preferably A.R.I.B.A. in addition).

(d) Preparation of Development Plans. Inter T.P.I. or A.M.T.P.I.

(e) Control of Development. Inter T.P.I. (Grades III and IV).

(f) Planning Charts, Diagrams and Maps. Inter T.P.I. (Grades III and IV).

The appointments are subject to the provisions of the Local Government Superannuation Act 1937, and the successful candidates will be required to pass a medical examination.

Intending applicants must inform the City Engineer and Surveyor of the number of the post in which they are interested and the appropriate form of application will then be forwarded, which form, together with details of experience, and accompanied by not more than three testimonials, should be received by the undersigned not later than the 6th June, 1950.

Canvassing will disqualify an applicant who is related to a Member of, or a Senior Officer of, the Council, must disclose the fact in his application. No assistance can be given in the provision of housing accommodation.

W. H. LEATHEM, Town Clerk.
Town Hall, Bradford. 14520

LONDON COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited for positions of ARCHITECT, Grade III (£550-£700) and TECHNICAL ASSISTANT (up to £580) for work on new schools and other public buildings. The positions are supernumerary. Candidates for Grade III positions should possess professional qualifications.—Application forms from The Architect (A.R.P.S.) The County Hall, Westminster Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. (384) 10097

CITY OF BRADFORD.

CITY ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

APPLICATIONS are invited for the following appointments in accordance with the National Scale of Salaries on the grades indicated.

- (a) Post No. 122. ARCHITECTURAL ASSISTANT. A.P.T. VI. £595-660.
- (b) Post No. 123. ARCHITECTURAL ASSISTANT. A.P.T. IV. £480-525.

Candidates for appointment (a) should be Associates of the R.I.B.A. and should have had experience in the design of houses, flats and shops and the layout of housing estates. Candidates for appointment (b) should have passed the Intermediate Examination of the R.I.B.A. and experience of house design and estate layout will be an advantage.

The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination.

Intending applicants must inform the City Engineer and Surveyor of the number of the post in which they are interested and the appropriate form of application will then be forwarded, which form, together with details of experience, and accompanied by not more than three testimonials, should be received by the undersigned not later than the 6th June, 1950.

Canvassing will disqualify an applicant who is related to a Member of, or a Senior Officer of, the Council, must disclose the fact in his application. No assistance can be given in the provision of housing accommodation.

W. H. LEATHEM, Town Clerk.
Town Hall, Bradford. 14523

MINISTRY OF WORKS.

VACANCIES exist for SENIOR and LEADING ARCHITECTURAL ASSISTANTS in London, at Risley (Warrington) and at Capenhurst (Cheshire), for drawing office duties in connection with important Research Establishments.

Candidates should be of British nationality and have had a recognised architectural training and good experience.

There are also vacancies for first class Draughtsmen in the Senior Architectural Assistant Grade. Salary: Senior Architectural Assistants—London, £625-750 per annum; Risley and Capenhurst, £595-720 per annum.

Salary: Leading Architectural Assistants—London, £500-625 per annum; Risley and Capenhurst, £470-595 per annum.

Hostel accommodation, for men, at reasonable cost, is available at Risley, and there is a possibility of housing being available in the near future at Capenhurst.

Apply in writing, stating locality desired, age, training and experience, to: Chief Architect, W.G. 10/A.N., Ministry of Works, Abell House, John Islip Street, London, S.W.1. 10095

NORFOLK COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited for the permanent appointment of ENGINEERING ASSISTANT on the staff of the County Architect's Department at a salary in accordance with National Grade V (£520-£570 per annum).

Candidates must have had good technical training and experience in heating and hot water installations, gas and steam services, heating and ventilation generally, and must be capable of preparing design drawings, calculations, specifications and estimates. Preference will be given to candidates who have passed the Final examination of the Institution of Heating and Ventilating Engineers.

The appointment will be subject to the Local Government Officers' Superannuation Acts, to a satisfactory medical certificate and to one month's notice on either side.

Applications must state clearly age, qualifications, details of training, experience, previous appointments, with dates, salaries, etc., and the names and addresses of three persons to whom reference may be made. Applications must be delivered to Mr. C. H. Thurston, L.R.I.B.A., F.R.I.C.S., County Architect, 25 Thorpe Road, Norwich, by not later than Monday, 12th June, 1950.

H. OSWALD BROWN, Clerk of the Council.
County Offices,
Thorpe Road, Norwich. 14519

BURGH OF HAMILTON.

APPLICATIONS are invited for the following appointments.—

(a) CHIEF ASSISTANT PLANNING OFFICER. Applicants should be Chartered Architects, Civil Engineers or Surveyors, and must have a sound knowledge of Town Planning Law and Practice.

If the successful applicant is a member of the Town Planning Institute he will be placed in A.P.T. Grade VII (£635-£710), otherwise placing will be within Grade VI (£595-£660).

A house will be made available, if required.

(b) SENIOR ARCHITECTURAL ASSISTANT. Applicants should have a sound knowledge of contemporary design and be experienced in the preparation of layout plans and working drawings. The salary will be in accordance with A.P.T. Grade V-Va (£520-£610). Placing within the Grade will be in accordance with the experience of the successful applicant.

(c) ARCHITECTURAL DRAUGHTSMAN (Town Planning). Applicants should give full particulars of their experience. The salary will be in accordance with Grade H.D. 1 (£395-£440).

Applications for the above posts, stating age, and with full particulars of qualifications and experience, together with copies of recent testimonials, should be lodged with the undersigned not later than Thursday, 1st June, 1950. The appointments are subject to the Local Government Superannuation (Scotland) Act, 1937, and canvassing either directly or indirectly will be a disqualification.

JOHN R. McLENNAN, Town Clerk.
The Town House, Hamilton. 14519
10th May, 1950.

LONDON COUNTY COUNCIL.

APPLICATIONS are invited for unstaffed positions of (i) ARCHITECT, Grade III (salaries up to £700 a year) and (ii) ARCHITECTURAL ASSISTANTS (salaries up to £580 a year) in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

Successful candidates will be required to undertake the design, layout and preparation of working drawings for housing schemes (cottages and multi-storey flats) and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognised professional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required, and quote ref. G.R.3). Canvassing disqualifies. (2369) 10084

THE CIVIL SERVICE COMMISSIONERS invite applications for two permanent posts of ARCHITECTURAL ASSISTANT in the Post Office.

Candidates must be under 28 years of age on 1st June, 1950, with extension for regular service in H.M. Forces and, up to two years, for service in H.M. Forces otherwise than on a regular engagement.

Candidates must have passed the Intermediate examination of the Royal Institute of British Architects and have had five years' experience of architectural work.

Inclusive London salary scales—£300 - £525 (men); £100 - £450 (women). Rates outside London somewhat lower. Starting pay according to age.

Further particulars and application forms from the Secretary, Civil Service Commission, Scientific Branch, 7th Floor, Trinidad House, Old Burlington Street, London, W.1, quoting No. 1105; completed applications must be returned by 22nd June, 1950. 14541

DUNDEE COLLEGE OF ART SCHOOL OF ARCHITECTURE. The Governors of the Dundee Institute of Art and Technology invite applications for the position of LECTURER AND STUDENT INSTRUCTOR.

Applicants should be members of the R.I.B.A. and should preferably be holders of a degree or diploma of a recognised School of Architecture.

Salary Scales—Men £450 by £20 to £700; Women £400 by £15 to £575, with placing according to qualifications and experience.

Applications should be lodged as soon as possible and should be on the prescribed form, copies of which, with full particulars, may be obtained from

J. CAMERON FREER, Clerk and Treasurer.
B.1 Street, Dundee. 14515
8th May, 1950.

BOROUGH OF BRENTFORD AND CHISWICK.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

BOROUGH SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the appointment of an ARCHITECTURAL ASSISTANT on the permanent staff at a consolidated salary according to A.P.T. Division, Grade VI of the National Scheme (£595 to £660 per annum, plus appropriate London "weighting"), commencing 1st year, the appointment being determinable by one month's notice on either side.

Applicants should be qualified as Associate Members of the Royal Institute of British Architects (or hold a similar qualification), but consideration will also be given to applicants intending shortly to take the Associate Examination.

Applicants should have had extensive knowledge in general architectural work, house planning and design, including preparation of working drawings and specifications.

The Council have under consideration the possibility of providing housing accommodation for the successful applicant.

Applications for the above-mentioned appointment must be made on the prescribed form (which contains all particulars and conditions of appointment), obtainable from the undersigned, to whom applications should be sent not later than the 5th June, 1950.

W. F. J. CHURCH, Town Clerk.
Town Hall, Chiswick, W.4. 14536

COUNTY BOROUGH OF BOURNEMOUTH.

BOROUGH ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited for the following appointment:

ASSISTANT ARCHITECT—Unestablished Post—Salary Grade A.P.T. VI, £595-£660 per annum—required for reconstruction works on beach buildings. Applicants must be members of the R.I.B.A. The successful candidate will be appointed at his present salary if such salary is within the incremental scale of the advertised post.

The above appointment will be terminable by one month's notice, in writing, on either side and subject to the provisions of the Local Government Superannuation Act, 1937, also to the conditions of service in accordance with the National Scheme. The successful candidate will be required to pass a medical examination.

No assistance can be offered regarding housing accommodation.

Applications, on forms to be obtained from the Borough Architect, Town Hall, Bournemouth, accompanied by copies of three recent testimonials, to be returned to the undersigned in envelopes endorsed "Staff Architectural" not later than 9 a.m. Saturday, 10th June, 1950.

A. LINDSAY CLEGG, Town Clerk. 14537

WELSH REGIONAL HOSPITAL BOARD.

APPLICATIONS are invited for the following permanent posts on the Board's Headquarters staff—

- Architect's Division:
(a) ASSISTANT ARCHITECT. Salary A.P.T. Grade VIII (£685-£760).
(b) ASSISTANT ARCHITECT. Salary A.P.T. Grade V (£520-£570).

Applicants for both posts must be registered architects, must have passed the Final examination of the R.I.B.A., and have had wide experience in planning and construction, and in the preparation of working drawings for important hospital buildings. The appointments are supernumerary.

Applications, stating age, qualifications and experience, with the names of two referees, should be addressed to the Secretary, Temple of Peace and Health, Cathays Park, Cardiff, to reach him not later than June 30, 1950. 14542

MIDLOTHIAN COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited for the post of ARCHITECTURAL ASSISTANT. Salary A.P.T. VII—£655-£710. Candidates should be Associates of the R.I.B.A. and possess a sound knowledge of Housing and School Building.

Applications, together with copies of two recent testimonials, are to be lodged with the subscriber not later than 17th June, 1950.

JAMES McBOYLE, County Clerk.
County Buildings,
George IV Bridge, Edinburgh, 1. 14545

CITY OF BIRMINGHAM.

PUBLIC WORKS DEPARTMENT.

APPLICATIONS are invited for the following appointments to the permanent staff in the Architectural Section of the Public Works Department—

- (a) SENIOR QUANTITY SURVEYOR. Grade A.P.T. VIII (£885-£1060).
(b) QUANTITY SURVEYOR. Grade A.P.T. VI (£595-£660).

For the post of (a) applicants must be Associate Members of the Royal Institute of Chartered Surveyors (Quantity Section) and have had considerable experience in a Quantity Surveyor's Office and be competent to "take-off" and prepare Bills of Materials for all classes of buildings.

For post (b) applicants must have passed the Intermediate Examination of the Royal Institute of Chartered Surveyors (Quantity Section) and should have had experience in a Quantity Surveyor's Office and be competent to Abstract and Bill for all classes of buildings.

Applicants need not have had previous Local Government experience.

The salary scales are in accordance with those laid down under the National Scales of Salaries and the commencing salary will be fixed at an incremental point within the grade according to the qualifications and experience of the candidates appointed. The appointments may be terminated by one month's notice on either side.

The successful applicants will be required to undergo a medical examination by the Corporation Doctor and the appointments will be subject to the provisions of the Local Government Superannuation Act, 1937.

Forms of application may be obtained from the undersigned stating what post is applied for, and are to be returned accompanied by copies of three recent testimonials not later than 24th June, 1950. Canvassing, either directly or indirectly, will disqualify.

HERBERT J. MANZONI.

City Engineer and Surveyor.
The Civic Centre, Birmingham, 1. 14546

URBAN DISTRICT OF EAST BARNET.

ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the following permanent appointments—

- (a) ASSISTANT ARCHITECT. A.P.T. Grade V (£520-£570) plus the appropriate London Weighting.
(b) ARCHITECTURAL ASSISTANT. A.P.T. Grade III. £450-£495 plus the appropriate London Weighting.

Consideration will be given to the provision of housing accommodation if required.

Applicants should be qualified by examination, and preference will be given to those having previous experience with Local Authorities. Each appointment will be subject to one month's notice on either side, and to the provision of the Local Government Superannuation Act, 1937. Successful candidates will be required to pass a medical examination.

Forms of application should be obtained from the undersigned and returned by not later than Monday, 12th June, 1950.

C. M. BARNES O.B.E. M.I.Mun.E. F.R.S.I.
Engineer and Surveyor.
Town Hall, Station Road,
New Barnet, Hertfordshire. 14547

LONDON COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.
PLANNING STAFF.

APPLICATIONS are invited for positions of PLANNING OFFICER, Grade I (£960-£960), Grade II (£700-£840), Grade III (£550-£700), and TECHNICAL ASSISTANT (up to £580). The positions are supernumerary. Candidates for Grade I positions should have architectural and town planning qualifications and will be engaged on Reconstruction Areas and Detailed Planning. Candidates for Grade II and III positions should have architectural or surveying qualifications with town planning qualifications in addition, and will be engaged on Development Plan, Development Applications and Detailed Planning. Technical Assistants are required for work on Development Applications and Detailed Planning.

Particulars and application forms from The Architect (A.R./P.P.), The County Hall, Westminster Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. (395) 10098

NORFOLK COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited for the permanent appointment of ASSISTANT ARCHITECT at a salary in accordance with National Grade VI (£595-£660 per annum). Candidates must be registered architects and must hold a recognized architectural qualification; they must have had a good general architectural experience and have a sound knowledge of design, construction and specifications. The appointment will be subject to the Local Government Officers' Superannuation Acts, to a satisfactory medical certificate, and to one month's notice on either side. National Scheme of Conditions of Service will apply.

Applications must state clearly age, qualifications, full details of training, experience and previous appointments, with dates, salaries and designations; the names and addresses of three persons to whom reference may be made must be stated. Applications must be delivered to Mr. C. H. Thurston, L.R.I.B.A., F.R.I.C.S., County Architect, 25 Thorpe Road, Norwich, by not later than Wednesday, 7th June, 1950.

H. OSWALD BROWN, Clerk of the Council.
County Offices,
Thorpe Road, Norwich. 14546

CROWN AGENTS FOR THE COLONIES.

QUANTITY SURVEYOR required by the Government of Kenya for the Public Works Department for one tour of four years. Commencing salary according to age and experience in scale £655 rising to £1,140 a year. Orthal allowance £10. Gratuity on satisfactory completion of service. Free passages and liberal leave on full salary. Candidates, not over 45 years of age, must be Chartered Quantity Surveyors with considerable experience—Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4 Millbank, London, S.W.1, quoting M/N/25532/3A on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration. 14543

THE TRUSSED CONCRETE STEEL CO. LTD.

REINFORCED CONCRETE ENGINEERS
AND CONTRACTORS.

INVITE applications for the following positions on their permanent staff.

- (a) ENGINEERS FOR THE DESIGN OFFICE.
(b) DETAILERS AND DRAUGHTSMEN FOR THE DESIGN OFFICE.
(c) ENGINEERS FOR THE CONSTRUCTION DEPARTMENT.

Wide experience—all types of reinforced concrete work.

All positions are progressive and pensionable, and vacancies occur in London, Birmingham, Manchester and Glasgow. Five-day week. Salary according to experience and ability. Details of training, experience, and salary expected should be sent to Truscon House, 35/41 Lower Marsh, London, S.E.1 (adjacent to Waterloo Station). All replies will be treated as confidential. 10094

PUBLIC SERVICE OF VICTORIA, AUSTRALIA.

VACANCIES FOR DRAUGHTSMEN.

EXPERIENCED Architectural and Mechanical and Electrical Engineering Draughtsmen are required by the Public Works Department of Victoria, Melbourne.

Salary ranges: Grade I—£577-£579; Grade II—£448-£501; Grade III—£390-£416; Grade IV—£312-£364.

In addition to the above rates a cost of living allowance—at present £114 a year—is payable.

Applications in writing in duplicate, giving age and details of experience and qualifications, should be lodged at the Office of the Agent-General for Victoria, Victoria House, Melbourne Place, Strand, London, W.C.2, not later than 31st May, 1950.

Applicants will be selected for subsequent interview when details of appointment, etc., will be made available. 14516

ARCHITECTURAL APPOINTMENTS VACANT

ARCHITECT'S Assistant required immediately with experience of industrial buildings and capable of preparing working drawings and details.—Applicants are requested to state age, experience and salary required to The Austin Motor Co. Ltd., P.O. Box 41, Birmingham. [4548]

ARCHITECTURAL Assistant required by Gollins, Melvin & Partners, F.R.I.B.A. Capable working drawings. Salary £350/£550. Office experience essential. First-day week.—Telephone Museum 0683 for appointment. [4532]

PERMANENT positions available for competent Assistants in established London office. Salary: Juniors £350/£550, Seniors £650/£850 per annum.—Reply with full details of experience to Box 4358, The Architect and Building News. [4533]

MAX Lock requires qualified Architect as Assistant in detailed design and layout of large housing scheme near Portsmouth. Experience of housing work essential, planning qualifications preferred. Salary £500 p.a. Pleasant accommodation provided.—Apply to Max Lock, "Alverbank," Stanley Park, Gosport, Hants. [4535]

SITUATIONS VACANT

ARCHITECTURAL Metal Workers require a Designer-Draftsman of considerable merit. Top salaried position for skilled man.—Apply The Morris Singer Company, Hope House, 61, Peter Street, Westminster, S.W.1. [10095]

ARCHITECT Surveyor required at Head Office for current maintenance and improvement of approx. 60 shops and restaurants (majority in London area). Applicant should have several years' practical office and site experience, be capable of carrying out record surveys of all firm's properties and of drawing up small alteration schemes, including specifications, putting these out to tender and seeing them through to completion (larger schemes are being handled by independent outside firm of Architects, who are prepared to give successful applicant occasional guidance).—Apply in writing, giving full particulars of training, qualifications and previous experience, to The Secretary, Fuller's Ltd., 45 Great Church Lane, Hammersmith, W.6. [4518]

FOR SALE

SLATES. All sizes in Asbestos and Quarry including Grey and Red Diagonals. Corrugated and Flat Asbestos Sheets. List.—G. Paget Ellis & Co. Ltd., 7 Oxford Street, Leamington. [10100]

CONTRACTS

STATES OF GUERNSEY HOUSING AUTHORITY.

COURTIL ST. JACQUES (MON PLAISIR)
—32 HOUSES.

TENDERS are invited for the erection of 32 (THIRTY-TWO) HOUSES on a site at Courtil St. Jacques (Mon Plaisir), St. Peter Port, Guernsey. Plans, Specifications and Forms of Tender may be obtained at the office of the undersigned upon payment of One Pound (£1), which will be refunded on the receipt of a bona-fide tender and the return of all plans and documents.

Tenders, in sealed envelopes, addressed to the President, States Housing Authority, Hadley House, Lefebvre Street, St. Peter Port, Guernsey, and endorsed "Tender for Houses, Mon Plaisir," must be delivered at the office of the Authority not later than noon on Monday, the 26th June, 1950.

G. HEGGOS, States Engineer,
States Office, Guernsey.
19th May, 1950. [4544]

THE Agent General for Western Australia desires to advise prospective tenderers that the closing date in Perth, Western Australia, for the receipt of tenders for the supply and erection of 750 Prefabricated or Precast Houses for the State Housing Commission of Western Australia has now been extended to the 13th July, 1950. [4534]

FOR SALE

ALL Mouldings, Plain and Embossed, and Embossed Ornaments. Numerous designs.—Dareve's Moulding Mills Ltd., 60 Pownall Road, Dainton, E.S. [10086]

"ELFIX" Insulated Floor Batten Fastener. Low cost and used on leading schemes.—Details, G. Paget Ellis & Co. Ltd., 7 Oxford Street, Leamington Spa. [10099]

NISSEN Type Huts, ex-Government stock, reconditioned and supplied ready for erection. All sizes in 6ft. multiples, 36ft x 16ft, £65 and £54; 24ft x 16ft, £46 and £38; 72ft x 16ft, £122 and £97. Delivered U.K. Plasterboard huts and other buildings. Some 24ft. span Nissen.—Write, call or telephone, Universal Supplies (Belvedere) Ltd., Dept. 32, Crabtree Manorway, Belvedere, Kent. Tel. No. Erith 2948. [10057]

STOUT Copper tube, complete with all unions, 120ft. 4in., 45ft. 6in. Intended originally for lining to Artesian bore and not now required.—Smith-Woodley & Partners, Cullingham, Newark. Notes. [4549]

FOR SALE

FOR sale, good second-hand Galvanised Wire Netting in rolls about 25 yards long x 19 feet wide approx. 3 1/2 in./4 in. hexagonal mesh. Price 5s. per roll, at our works in Sheffield. Delivered home, carriage charges extra.—Thos. W. Ward Ltd., Albion Works, Sheffield. [4551]

MISCELLANEOUS

ASBESTOS Sheets from stock. Supplied and fixed or supplied only. Any district.—Wentley Contractors Ltd., Palace of Engineering, Wentley, Middle. [4507]

DOORS! Doors! Doors! All kinds and sizes, hard and softwood, new and second-hand. Bought and sold.—Meikle's Shipyard, POP. 2034, 1 Strawberry Vale, Twickenham. [4489]

AN ADAPTABLE POLICY

THE adaptable policy recommended by the A.B.S. involves only a small annual cost to provide a substantial tax free income for dependents, or on retirement a cash sum or pension for life.

For example a man of 30 years next birthday can provide cover for dependents to the extent of £6,250 for an annual premium of only £35 6s. 8d.

Special rebate for Architects and Architects' Assistants.

Particulars from: The Secretary,
A.B.S. Insurance Department,
66, Portland Place, London, W.1.
(Tel. WELbeck 3721).



"ANKARBOARD" Fibre Building Board
Distributors in all parts of Great Britain. Supplies from forward Shippers and available Stocks in Warehouses at Main British Ports.

THE WOOD FIBRE WALLBOARD CO., 8, CITY ROAD, FINSBURY SQUARE, LONDON, E.C.1.



'KISOL' VERMICULITE

THE INERT ROT-PROOF, VERMIN-PROOF, and FIRE-PROOF INSULATING PROCESSED MINERAL. LOOSE FILL, CONCRETE AND PLASTER AGGREGATES.

Send for samples and details. MonARCH 0455

INDEX TO ADVERTISERS

Official Notices, Tenders, Auctions, Legal and Miscellaneous Appointments on pages 36, 37 and 38

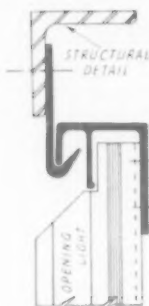
<p> Al-Mare (Great Britain) Ltd. ... 29 Allied Paints & Chemicals Ltd. ... 29 Anderson, D. & Son Ltd. ... 34 Baldwin, Son & Co. Ltd. ... 35 Bath & Portland Stone Firms Ltd. ... 34 Battley, Ernest Ltd. ... 19 Blackwell, Wyckham Ltd. ... 34 Bolton Gate Co. Ltd. ... 27 Boulton & Paul Ltd. ... 13 Box, C. W. ... 34 Bostwick Gate & Shutter Co. Ltd. ... 34 Bratt Colliery Ltd. ... 34 British Constructional Steelwork Association ... 12 British Electrical Development Association ... 12 British Reinforced Concrete Engineering Co. Ltd. <i>Outside Back Cover</i> Burn Bros. (London) Ltd. ... 30 </p>	<p> Callow Rock Lime Co. Ltd. ... 13 Carron Company ... 28 Cement Marketing Co. Ltd. ... 19 Celotex Ltd. ... 2 Clerk, Donald & Son Ltd. ... 24 Copper Penfold & Co. Ltd. ... 4 College of Estate Management ... 34 Curlew Fireproof Doors Ltd. ... 32 Dunlop Rubber Co. Ltd. ... 1 Dunlop & Ranken Ltd. ... 1 </p>	<p> Hall, Matthew & Co. Ltd. ... 20 Harvey, G. A. & Co. (London) Ltd. ... 20 Hope, Henry & Sons Ltd. ... 21 Jackson Electric Stove Co. Ltd. ... 26 Keir & Cawder Ltd. ... 24 Lower, R. A. & Co. Ltd. ... 16 Lyon Foundry Ltd. ... 25 Marquis, M. ... 24 Matthews & Yates Ltd. ... 11 Mewis, G. E. Ltd. ... 11 National Coal Board ... 14 Northair Organisation ... 34 Palmer, T. W. (Merton Abbey) Ltd. ... 11 Pilkington Bros. Ltd. ... 23 Radiation Ltd. ... 14 Ringer Building Works Ltd. ... 14 Rippers Ltd. ... 25 Rom River Co. Ltd., The ... 31 </p>	<p> Rubberware Ltd. ... 27 Rubensoid Co., Ltd. ... 15 Sankley-Sheldin Ltd. ... 28 Semtex Ltd. ... 7 Sharman, R. W. ... 14 Sharp Bros. & Knight Ltd. ... 9 Spiral Tube & Components Ltd., The ... 18 Tentex Fibre Board Co. Ltd. ... 34 Triplex Foundry Ltd. ... 22 Turner, Charles & Son Ltd. ... 26 United Paint Co. Ltd. ... 15 Unisolv Balance Co. Ltd. ... 33 Ward, Thomas W. Ltd. ... 5 West, A. & Partners Ltd. ... 32 Williams & Williams Ltd. ... 18 </p>
---	---	--	--

Printed in Great Britain by the **BUCKS FREE PRESS LTD., Newspaper House, High Street, High Wycombe,** for the Publishers, **ILIFFE & SONS LTD., Dorset House, Stamford Street, S.E.1.**

Two revolutionary inventions affecting opening lights in ALUMINEX patent glazing

It has been said that one test of a good invention is whether the laymen will say — after it has been invented — that it is obvious. Here is a brief account of two such deceptively simple inventions that put Aluminex Patent Glazing opening lights in a class on their own for operational efficiency.

An opening light in Aluminex Patent Glazing is hung on a single hinge: a continuous hook hinge that extends the whole length of the window. The hinge is shown in the accompanying sketch. It will be seen from its simple shape that it cannot bind as ordinary knuckle hinges often do, nor does it suffer from other limitations of the ordinary hinge. The Aluminex hook hinge, being continuous, gives uniform support to the frame along its entire length. This means that the framework of the lights hung on these hinges may be constructed throughout of much lighter than normal metal sections.



This drawing shows the design of the continuous hinge used on the Aluminex opening lights. The head weathering makes flashings unnecessary.

It will immediately be seen how materially the invention of this hinge affected the progress of patent glazing. The hinge formed a natural addition to the other Aluminex components because these elements — the glazing bar, the continuous glazing cover strip, the zed weathering detail and the shoe — were all of similarly simple and functional design. (They were indeed the results of a basic re-thinking of patent glazing.)

Three advantages of the continuous hinge

The exact form in which the continuous hinge was incorporated in the Aluminex system (again, as the diagram shows) brought three additional advantages. First, the hinge solved the problem of mounting long and continuous lights without hinges or hinge pins. Second, in the form adopted it provided an integral and draughtproof head weathering which made flashings unnecessary. Third, the hinge also provided, by reason of its open and simple form, a means of accommodating without strain or loss of alignment, the small structural variations which occur in practice, but which always tend to impair the free action of ordinary hinges.



Teleflex gearing here operates continuous, top-hung Aluminex ventilators in vertical sidewall glazing at a factory in Essex.

The continuous hinge allowed Aluminex engineers to build opening lights of 200 ft. length as a matter of course, and even greater lengths where circumstances demanded it, or where the opening gear could be power-operated.

New operating gear

At this point we must take into account operating gear. And it is precisely in this field that Aluminex was again fortunate in adding to itself a product of new thinking similar to itself in intelligent simplicity. This was the Teleflex opening gear. It first came into its own in the late war, at one time it was performing such diverse tasks as moving the tail fins of R.A.F. aircraft and swinging the control turrets of naval guns. Today its essential characteristics are the same as those which won acceptance for it during the war, although since then, it has been refined and improved in most particulars. Teleflex is a threaded cable which operates through small, well-designed gear boxes and is capable of transmitting movement over great distances by almost any route. It can be mounted on lighter metal sections than is the case with tension rod gearing and its mechanical efficiency is such that opening lights 200 ft. in length may be operated with very little effort. In addition, the costs of manufacture and erection are lower than with tension rod gearing. As a whole, therefore, the Teleflex opening light operating gear is a natural counter-

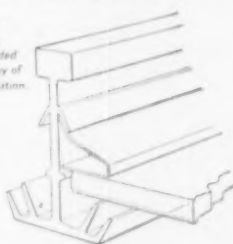
part of the Aluminex opening light hung on the continuous hook hinge.

The general character of the Aluminex patent glazing system of which these two inventions now form part, may be summarised as follows:

It consists of extruded aluminium alloy glazing bars of great strength and resistance to corrosion. Glass panes are clipped to these bars by means of continuous rolled glazing cover strips, also made of aluminium alloy. The other specially designed fittings are the zed weathering detail and the glass shoe.

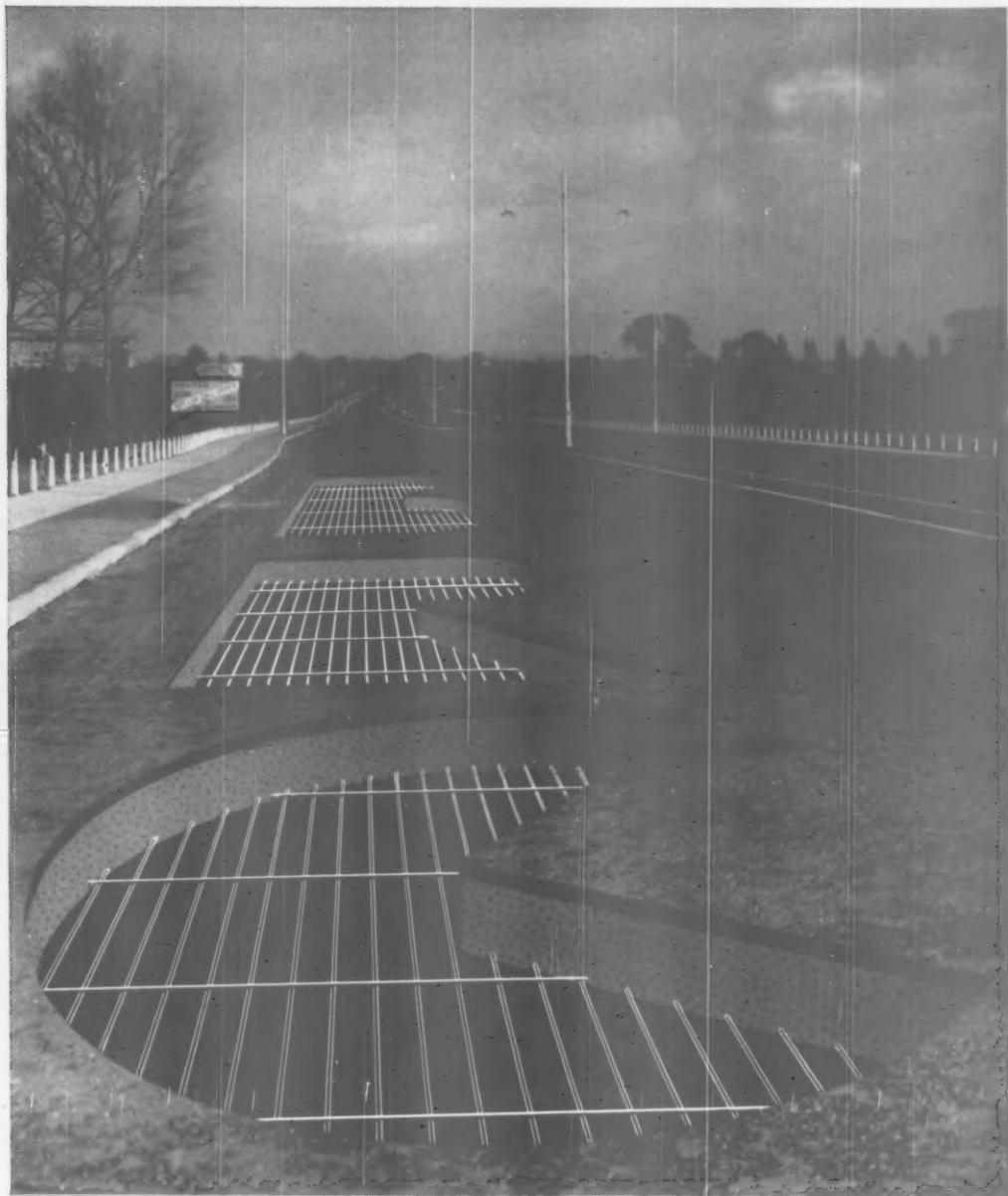
Great areas may be glazed by this method. The north windows of the Brabazon hangar at Filton measure 1,052 ft. by 50 ft. Aluminex may be double-glazed to provide a cladding which

This Aluminex patent glazing bar is of extruded aluminium alloy of special composition. Here is seen one glazing cover strip holding a pane of glass in position on the bar.



The Architect who turns to Aluminex Patent Glazing has at his service a method of architectural cladding capable of versatile applications. It is an accepted system yet remains susceptible to imaginative development. The Company extends its fullest co-operation to all Architects who wish to discuss new applications of Aluminex.

For further information please communicate with the **Aluminex Division of Williams & Williams Limited, Reliance Works, Chester.** Telephone: Chester 39000 (7 lines). Telegrams: Reliance, Chester. And at **Victoria House, Southampton Row, London, W.C.1.** Telephone: HOLLORN 9861.



... within the Road's structure
BRC Welded Fabric

THE BRITISH REINFORCED CONCRETE ENGINEERING CO. LTD., STAFFORD
London, Birmingham, Bristol, Leeds, Leicester, Manchester, Newcastle, Sheffield, Cardiff, Glasgow, Dublin, Belfast